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Undergraduate Bulletin

Virginia Commonwealth University
Located in the heart of Richmond, the capital of Virginia since 1779, Virginia Commonwealth University serves an integral role in the economic health of the city and the state, educating the current and future work force, reaching out to the community, advancing research and enhancing patient care.

VCU was founded in 1838 as the medical department of Hampden-Sydney College, becoming the Medical College of Virginia in 1854. In 1968, the General Assembly merged MCV with the Richmond Professional Institute, founded in 1917, to create Virginia Commonwealth University.

Today, VCU offers comprehensive undergraduate, master’s, doctoral and professional programs and encompasses one of the largest academic health centers in the nation. With a record $256 million in sponsored research funding last fiscal year, VCU became one of only 28 public universities in the country with an academic medical center to be designated as a research university with very high research activity as well as a Community Engaged Institution, both by the Carnegie Foundation. Its centers and institutes of excellence support the university’s research mission and involve faculty from multiple disciplines in the arts, public policy, biotechnology and health care discoveries.

VCU enrolls more than 31,000 students in 222 degree and certificate programs in the arts, sciences and humanities. Sixty-six of the programs are unique in Virginia, many of them crossing the disciplines of VCU’s 13 schools and one college. VCU has a full-time instructional faculty of more than 2,000 who are nationally and internationally recognized for excellence in the arts, business, education, engineering, the humanities, the life sciences, social work and all the health care professions. With more than 19,000 employees, VCU and the VCU Health System also have a significant impact on Central Virginia’s economy.

Building on the foundation of VCU’s nationally ranked academic programs and academic medical center, research and scholarly productivity, and engagement with the communities it serves, the university’s strategic plan, Quest for Distinction, launches a new vision for VCU: to elevate its stature and become the nation’s top urban, public research university. This focused plan capitalizes on the outstanding assets of the VCU experience and truly distinguishes VCU as a major research university committed to academic quality and student success at all levels.

Quest for Distinction also embodies VCU’s commitment to human health through the VCU Medical Center, which includes the university’s health sciences schools and offers state-of-the-art care in more than 200 specialty areas, many of national and international note, including organ transplantation, head and spinal cord trauma, burn healing and cancer treatment.

VCU and the VCU Health System have been honored with prestigious national and international recognition for top-quality graduate, professional and medical-care programs, reflecting a commitment to be among America’s top research universities focused on student learning.

**Administration**

VCU administration provides leadership and organizational structure for the university, overseeing its goals and mission. Refer to each unit’s Web site for a current listing of administrators.

**Deans**

Deans provide leadership for their respective school or college. Refer to each unit’s Web site for a current listing of its deans, departmental chairs and program heads.

**Accreditation**

Virginia Commonwealth University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award baccalaureate, master’s, doctoral and first professional degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097; telephone: (404) 679-4500. Note: The Commission is to be contacted only if there is evidence that appears to support an institution’s significant noncompliance with a requirement or standard.

**Academic program accreditation**

See the college/schools for detailed information about program accreditation.

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**Specialized program accreditation or certification**

**Campus Police**

Police Academy
Certified by the Virginia Department of Criminal Justice Services

**Division of Student Affairs and Enrollment Services**

University Counseling Services
American Psychological Association
Student Health Services
Joint Commission on Accreditation of Health Care Organizations

**Hospital accreditation**

VCU Health System
Joint Commission on Accreditation of Health Care Organizations

**Mission statement**

As the premier urban, public research university in Virginia, VCU’s mission is to advance knowledge and student success through its commitments to:

- An engaged, learner-centered environment that fosters inquiry, discovery and innovation in a global setting
- Research that expands the boundaries of new knowledge and creative expression and promotes translational applications to improve human health
- Interdisciplinary collaborations that bring new perspectives to complex problems and mobilize creative energies that advance innovation and solve global challenges
- Health care that strives to preserve and restore health for all people, to seek the cause and cure of diseases through groundbreaking research, and to educate those who serve humanity
- Diversity that provides a climate of inclusion, a dedication to addressing disparities wherever they exist, and an opportunity to explore and create in an environment of trust
- Sustainable, university-community partnerships that enhance the educational, economic and cultural vitality of the communities VCU serves in Virginia and around the world

**Vision statement**

VCU will be a premier urban, public research university distinguished by its commitment to:

- The intellectual and academic success of a diverse student body
- Research and discovery that advances knowledge, inspires creativity and improves human health
- The global engagement of students, faculty and staff that transforms lives and communities

**Core values**

1. Accountability – committing to the efficient and transparent stewardship of our resources to achieve institutional excellence
2. Achievement – ensuring distinction in learning, research and scholarly pursuits, service, and patient care
3. Collaboration – fostering collegiality and cooperation to advance learning, entrepreneurship and inquiry
4. Freedom – striving for intellectual truth with responsibility and civility, respecting the dignity of all individuals
5. Innovation – cultivating discovery, creativity, originality, inventiveness and talent
6. Service – engaging in the application of learning and discovery to improve the human condition and support the public good at home and abroad
7. Diversity – ensuring a climate of trust, honesty and integrity where all people are valued and differences are recognized as an asset
8. Integrity – adhering to the highest standards of honesty, respect and professional and scholarly ethics
Oak Ridge Associated Universities Consortium
Since 1963, students and faculty have benefited from VCU’s membership in Oak Ridge Associated Universities (ORAU), a consortium of 87 colleges and universities and a contractor for the U.S. Department of Energy. ORAU works with its member institutions to help students and faculty gain access to federal research facilities, to keep its members informed about opportunities for scholarship and research appointments and to organize research alliances among its members.

Faculty, graduate students and undergraduate students may access a wide range of opportunities for study and research, including the Lindau-Nobel Laureates and Powe Junior Faculty programs. Many of these programs are designed to increase the numbers of underrepresented minority students pursuing degrees in science- and engineering-related disciplines.

For more information about ORAU and its programs, contact:

Dr. Francis L. Macrina, ORAU Councillor for VCU
(804) 827-2262

Ms. Monnie E. Champion, ORAU Corporate Secretary
(865) 576-2206

Or you may visit the ORAU Web site at www.orau.org.

VCU Health System Authority
In April 1996, Gov. George Allen signed legislation that established the Medical College of Virginia Hospitals Authority. Effective July 1, 1997, the operations, employees and obligations of MCV Hospitals (formerly a division of VCU) were transferred to the Authority. Three years later, in connection with legislation signed by Gov. James Gilmore, the MCV Hospitals Authority became the Virginia Commonwealth University Health System Authority. The clinical activities of MCV Hospitals, MCV Physicians and the VCU School of Medicine are now coordinated and integrated by and through the VCU Health System.

The VCU Health System Authority is charged by statute with the missions of operating MCV Hospitals as teaching hospitals for the benefit of the schools of the Health Sciences Division of VCU, providing high quality patient care and providing a site for medical and biomedical research, all of which missions are required to be performed in close affiliation with the Health Sciences Division. The VCU Vice President for Health Sciences also serves as the Chief Executive Officer of the VCU Health System Authority, and five VCU faculty physicians serve as members of the Health System Board of Directors.

Board of Visitors
The Board of Visitors is the voting body of Virginia Commonwealth University. Each year, the governor of Virginia appoints members. Refer to Office of the President’s Web site for a current listing of board members.

Determination of student classification for in-state tuition purposes
Tuition is determined by the number of credit hours a student is taking, the student’s residency classification, course of study and classification level. For in-state tuition purposes, the student must comply with Section 23-7.4 of the Code of Virginia.

All applicants to VCU who wish to be considered for in-state tuition rates as Virginia residents must submit the Application for Virginia In-state Tuition Rates. This application is a part of the admissions packet and the nondegree-seeking student enrollment package. The residency determination of the applicant is conveyed at the time of admission as a degree-seeking student or nondegree-seeking student.

New and continuing students initially classified as non-Virginians for tuition purposes may request a review of the initial residency determination by completing an Application for Change of Domicile available from the Office of Records and Registration (online). The student must present clear and convincing evidence that he or she is not residing in the state primarily to attend school. The application deadline is 30 days prior to the start of the semester, and it is the responsibility of the student to establish or to file an appeal to change his/her residency classification prior to the start of classes for the semester under consideration. In accordance with the Code of Virginia, applications received after the start of the semester must be considered for the next semester. Submit completed applications with documentation to the university residency appeals officer. Processing may require four to six weeks; therefore it is strongly recommended that applications be submitted earlier than the stated deadline.

Our service to students is limited to assuring that they understand the procedures for appealing and that they have access to information about the relevant sections of the Code of Virginia. We provide information about the steps of our process and access to the applicable sections of the statute and the associated guidelines. We provide qualified staff to review the appeals and make decisions based on the information students provide. What we cannot do is provide advisement to students as to how to present their case for review; we cannot become the student’s advocate since we must make the decision.

Students approved for a change to in-state status for tuition purposes are notified by mail with copies of their approval letters sent to the Office of Financial Aid and the Office of Student Accounting. Students denied this status are also notified by mail. The denial letter informs the student of procedures for appeal of this decision, to include filing an appeal with the University Residency Appeals Committee.

Please note that a student with in-state status for tuition purposes who exceeds 125 percent of the credit hours needed to complete his program will be assessed a tuition surcharge.

Rights of students under the Family Educational Rights and Privacy Act
Pursuant to a federal statute enacted to protect the privacy rights of students (Family Educational Rights and Privacy Act of 1974 [FERPA], as amended, enacted as Section 438 of the General Education Provisions Act), eligible students of Virginia Commonwealth University are permitted to inspect and review education records of which the student is the subject. A statement of university policy concerning inspection and disclosure of education records has been formulated in compliance with the federal statute. Copies of the policy also are available from the Office of Records and Registration or on the Web at www.enrollment.vcu.edu/rar/registration/ferpa.html.

Generally, the act provides that no personally identifiable information will be disclosed without the student’s consent, except for directory information and information to other school officials with a legitimate educational interest. When personally identifiable information, other than directory information, is disclosed, a record will be maintained of these disclosures. This record also is available for inspection and review by the student.

Should the university fail to comply with the requirements of the act, the student has the right to file a complaint with the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave., S.W., Washington, D.C. 20202-5901.

Parental Notification Amendment
Amendments to FERPA signed into federal law in fall 1998 specifically allow notification to the parents or guardians of students under the age of 21 who violate any law or university rule regarding use or possession of alcohol or other controlled substance. The Virginia Attorney General’s Task Force on Drinking by College Students also recommended such notification in its 1998 report.

In accordance with these documents, a parental notification procedure has been included in the VCU Drug Free Schools and Workplace Policy.

Consumer information
The federal Higher Education Act of 1965, as amended, requires that institutions of higher education disclose certain consumer information to current students, prospective students, current employees and/or prospective employees. This consumer information can be found online at www.consumerinfo.vcu.edu.
To offer high quality academic advising. or call (804)
UC Web site
To encourage students to interact with faculty, academic advisers and other
UC Web site
To expand the number of students who access programs and services.
To enrich undergraduate education through a cohesive core education
The UC provides academic advising, learning support, the core curriculum, and
services.
The University College enhances student engagement and success by providing a
central home for academic support services and the core curriculum. The UC helps
students transition to VCU and provides the resources students need to be
successful. By providing students with a common experience, the UC makes the
undergraduate career more engaging and meaningful, particularly during the first
year of college.

Goals and objectives of University College
The goal of the UC is to promote the personal and academic success of each
student. The objectives are:
• To offer high quality academic advising.
• To encourage students to invest the time and effort necessary for achieving
success in their learning.
• To enrich undergraduate education through a cohesive core education
program.
• To increase opportunities for active learning through learning communities,
support services and classroom instruction.
• To encourage students to interact with faculty, academic advisers and other
support services personnel.
• To provide a network between courses and academic support programs.
• To expand the number of students who access programs and services.

General information
The UC provides a single administrative unit designed to enhance student
engagement and success through a variety of academic support services. Many of
the UC’s programs and services are offered through partnerships with both the
degree-granting colleges and the Division of Student Affairs and Enrollment
Services.
The UC provides academic advising, learning support, the core curriculum, and
orientation and programs for new students. The UC is the academic and
administrative home for a number of undergraduate courses, as well as academic
programs, student advising and special learning communities.

The University College provides academic advising for:
First-year students
Undeclared students
Transfer students
Students seeking admission into a health, law and professional programs
Interdisciplinary students and nondegree-seeking students
Student-athletes

Learning support resources
Campus Learning Center
Writing Center
Campus Testing Center

Courses
UNIV 101 Introduction to the University
Academic advising courses
UNIV 111 and 112 Focused Inquiry I and II
Core Curriculum

Programs
New student orientation
Programs for the parents and families of first-year students
Master adviser certification
VCU Works
Project Excel
Learning communities
Summer reading program
Focused Inquiry Associates

Academic advising
Academic advising helps students achieve academic success, as well as develop
and pursue educational and personal goals. The advising program also helps
students connect to the many resources offered within the University College and
throughout the university.
For more information on advising programs, visit the UC Web site or call (804)
827-8648.

First-year students
The UC provides academic advising for all first-year students, regardless of their
majors. All incoming students are assigned to a specific academic adviser who
works closely with them throughout their first year. Advising takes place in group
settings through the UNIV 101 Introduction to the University class and through
individual appointments. Students can expect their advisers to help them to
understand university procedures, interpret general education and major
requirements, address academic difficulties and help discover the educational and
career goals best suited to them.

Academic advising is an ongoing process. Advisers want to have continuing
relationships with their advisees. While first-year students are required to meet
with their assigned advisers before registering for classes each semester, it is also
important for students to meet with advisers throughout the first year. Students can
e-mail advisers to seek help and attend group advising sessions. After students
attain sophomore standing or are admitted into their programs of study, they will
be reassigned to faculty advisers within their majors.

While students are ultimately responsible for understanding information about
regulations, majors and courses as outlined in the Undergraduate Bulletin, academic
advisers can help students interpret information to ensure they make
appropriate educational choices.
For more information on advising programs, visit the UC Web site or call (804)
827-8648.

Undeclared students
The UC Discovery Program offers specialized advising for students who are
undecided about their programs of study and have not yet declared a major.
Discovery Program advisers help undeclared students consider educational options
and make appropriate choices based on personal interests, skills and abilities,
values, and professional goals.
Discovery Program advisers offer a blend of individual and group counseling
sessions and workshops to assist students who have not yet declared a major.
Advisers assist first-year undeclared students with monitoring their academic
progress, course scheduling, interpreting university regulations and procedures
and maximizing their academic success. In addition, each spring the Discovery
Program offers a three-credit class, UNIV 103 Education and Career Planning,
that concentrates on careers, educational opportunities and the development of
student potential. Advisers also provide alternative advising options for students
who do not qualify for, or are not admissible to, their preferred programs of study.
By considering alternatives, students will uncover options that they can find
personally, educationally and professionally fulfilling.

Undeclared majors are encouraged to select programs of study by the end of two
years. Students must declare majors within one of the university’s schools or
colleges no later than the semester in which they complete 60 credits.
For more information on advising programs, visit the UC Web site or call (804)
827-8648.

Transfer students
Students who transfer to VCU come from a wide range of two- and four-year
institutions. VCU recognizes that transfer students constitute a very diverse group
with varying and unique needs. Transfer students are served directly through the school or college according to their intended program of study. The University College helps transfer students work with undergraduate admissions and the undergraduate units to seek ways to continuously facilitate and enhance the transfer process to VCU. Transfer Student Services assists the schools and colleges of VCU to develop relationships with Virginia community colleges. VCU’s chief transfer officer, who resides within University College, develops and maintains articulation agreements with sister institutions, maintains the VCU Transfer Guide and serves as a point of contact for prospective and incoming transfer students.

For more information on advising programs, visit the UC Web site or call (804) 827-8648. Also see the VCU Transfer Guide Web site at www.transferguide.vcu.edu.

Pre-health and pre-law advising

The UC provides advising programs to assist students in preparation for admission into health sciences programs. Preparatory programs are available for careers in medicine, dentistry, dental hygiene, clinical laboratory sciences, radiation sciences, nursing, occupational therapy, optometry, pharmacy, physical therapy, paramedic and emergency medical services administration and veterinary medicine. Additionally, a Post-baccalaureate Health Sciences Certificate is available to students who have already earned bachelor’s degrees in non-science areas and plan to enter doctoral-level health science training programs.

All pre-health programs will be designated on a student’s record as an advising track interest. Pre-nursing, pre-clinical lab sciences, pre-dental hygiene, pre-occupational therapy and pre-radiation sciences can be designated as a primary major or advising track program.

When applying for admission or major changes, students select an advising track or one of the majors listed above to designate the specific health profession they wish to pursue.

In addition to a pre-health advising track interest, students designate any bachelor’s degree program as a primary major. Students who do not designate a specific major or who are undecided about a major will be placed into the interdisciplinary Science Bachelor of Science program with a health preparation/professional science concentration. Students will work with pre-health advisers to plan courses to meet their advising track and major interests.

The interdisciplinary science program is offered through the College of Humanities and Sciences. The concentration in health preparation/professional science allows students the flexibility to work toward a bachelor’s degree while taking the prerequisite courses for their intended health profession. Students will work closely with pre-health advisers to choose courses to fill health care program prerequisites and major requirements. As students successfully complete science courses and other admissions requirements, students and advisers will determine a timeframe to apply for admission into a health care training program.

The Office of Pre-health Advising offers many opportunities for students to become more involved in their chosen professions. Advisers work closely with students to ensure their intended majors and pre-health advising track areas of interest match closely to students’ interests, values and skills.

For more information on advising programs, visit the pre-health website or call (804) 827-8648.

Pre-law advising program

The University College supports aspiring law students by offering advisory services regarding the law school admission process. The coordinator of pre-law advising provides guidance and resources to students interested in pursuing a legal career and, where appropriate, acts as a liaison with law school admission offices. Students are offered assistance regarding curriculum, application procedure, financial aid and the law school admission test in preparation for the study of law. The Law School Admission Council and the American Bar Association provide comprehensive online information for students regarding preparation for law school, law school admission and accreditation, as well as careers in the legal profession.

As there are no particular prerequisites or a specific major necessary for entrance to law school, students may choose virtually any major or undergraduate program. Traditionally, students applying to law school have pursued liberal arts majors such as history, English, political science, economics, math/sciences or philosophy. Students wishing to specialize in a particular area of law may choose majors from academic disciplines as diverse as art, music, computer science, engineering, nursing, education, business or social work. Taking a broad range of difficult courses from demanding instructors is excellent preparation for a legal education. Whatever the major, it is important that students considering a career in law take advantage of opportunities to develop research and writing skills. Other skills that provide a sound foundation for a legal education include analytic and problem-solving skills, critical reading abilities, oral communication and listening abilities, task organization and management skills, and the values of serving faithfully the interests of others while also promoting justice.

The Department of Philosophy offers a philosophy of law minor for students interested in law school. It is important that students considering the legal profession take challenging course work in which they can develop analytical, research and written and verbal communication skills.

Preparation for the study of clinical laboratory sciences

The curriculum in pre-clinical laboratory sciences meets the minimum academic requirements for application to the Bachelor of Science degree program in clinical laboratory sciences offered by the VCU School of Allied Health Professions. Students intending to apply to a professional program at another institution should consult that institution’s bulletin for specific prerequisite courses.

Admission to and satisfactory completion of the two-year preparation program does not constitute admission to the junior- and senior-year professional program of the School of Allied Health Professions. In the fall of the year preceding the year of desired admission, the student must apply separately to the professional program through the VCU Office of Undergraduate Admissions, P.O. Box 980632, Richmond, VA 23298-0632.

Admission into the program is based on scholastic record, demonstrated aptitude and interest, and a personal interview conducted by the departmental admissions committee.

<table>
<thead>
<tr>
<th>First year</th>
<th>First semester</th>
<th>Second semester</th>
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</thead>
<tbody>
<tr>
<td>BIOL and BIOZ 101 Biological Concepts and Laboratory</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>BIOL 205 Basic Human Anatomy</td>
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<td>4</td>
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<td>CHEM 101-102 General Chemistry</td>
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<td>CHEZ 101 and 102 General Chemistry Laboratory I and II</td>
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<tr>
<td>CLLS 201 Introduction to Clinical Laboratory</td>
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<tr>
<td>Science</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>MATH 151 Precalculus Math</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>UNIV 111 and 112 Focused Inquiry I and II</td>
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<td>3</td>
</tr>
<tr>
<td>Humanities or visual arts courses</td>
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<tr>
<td>Social sciences courses</td>
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<th>Second year</th>
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<tr>
<td>PHIS and PHIZ 206 Human Physiology and Laboratory</td>
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</tr>
<tr>
<td>CHEM 309 Quantitative Analysis or CHEM 301</td>
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<td>-</td>
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<tr>
<td>Organic Chemistry</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric Workshop</td>
<td>-</td>
<td>3</td>
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<tr>
<td>Electives</td>
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<td>6</td>
</tr>
<tr>
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<td>12</td>
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</tr>
</tbody>
</table>

Preparation for the study of dental hygiene

The curriculum in pre-dental hygiene meets the minimum academic requirements for application to the Bachelor of Science degree program in dental hygiene offered by the VCU School of Dentistry. Admission to and satisfactory completion of the two-year preparatory program does not constitute admission to the junior- and senior-year professional program at the VCU School of Dentistry. In the fall of the year preceding the year of admission, the student must apply separately to that professional program through the VCU Office of Undergraduate Admissions, P.O. Box 980632, Richmond, VA 23298-0632.

Admission into the program is based on scholastic record, demonstrated aptitude and interest, and a credential review conducted by the departmental admissions committee.

<table>
<thead>
<tr>
<th>Credits</th>
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<tr>
<td>BIOL and BIOZ 101 Biological Concepts and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 205 Basic Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>BIOL and BIOZ 209 Medical Microbiology and Laboratory</td>
<td>4</td>
</tr>
</tbody>
</table>
CHEM and CHEZ 101 General Chemistry and Laboratory* 4
PHIS and PHIZ 206 Human Physiology and Laboratory 4
PSYC 101 Introduction to Psychology 4
SOCI 101 General Sociology 3
SPCH 121 Effective Speech 3
STAT 210 Basic Practice of Statistics 3*
UNIV 111 Focused Inquiry I 3
UNIV 112 Focused Inquiry II 3
UNIV 200 Writing and Rhetoric Workshop (taken in second year) 3
Approved electives 3
Humanities elective 3
Visual/performing arts 12
Total 60

* Students also must complete MATH 151 Precalculus as a corequisite for CHEM 101.

** It is strongly recommended that students take a visual and performing arts class to develop fine motor skills.

Preparation for the study of medicine and dentistry

Students interested in the pre-medical and pre-dental advising tracks are encouraged to obtain a bachelor’s degree and complete the necessary science and mathematics prerequisites. Prospective students should consult with their advisers for requirements specific to the schools of medicine and dentistry in which they have particular interest.

Prerequisites for medicine and dentistry

Biological science, general chemistry, organic chemistry, biochemistry, English, mathematics and physics are required for admission to the VCU schools of Medicine and Dentistry.

Other courses required for medical and dental school

Introductory psychology, sociology, statistics, and cell biology are prerequisites for medical school. Other science courses, though not required, are strongly recommended for pre-medical and pre-dental students. Courses that develop fine motor skills are strongly recommended for admission into the School of Dentistry.

Admission to and completion of a pre-medical or pre-dental program does not constitute admission to VCU’s School of Medicine or School of Dentistry. Students must apply separately to the medical or dental school of their choice at the appropriate time.

Students with an interest in preparing for medical or dental school should declare an academic major while also indicating a pre-medical or pre-dental advising track. Students do not earn a pre-medical or pre-dental degree.

Students unsure of their academic majors initially should clarify their academic interests through regular conversations with their advisers. Pre-medical and pre-dental students are encouraged to major in fields of greatest interest to them.

Preparation for the study of nursing

The curriculum in pre-nursing meets the minimum academic requirements for application to the traditional Bachelor of Science degree program in nursing offered by the School of Nursing at VCU.

Admission to and satisfactory completion of the one-year preparation program does not constitute admission to the professional program at VCU. In the fall of the year preceding the year of desired admission, the student must apply separately to the professional program in Nursing through the VCU Office of Undergraduate Admissions, P.O. Box 980632, Richmond, VA 23298-0632.

First semester Credits
BIOL and BIOZ 101 Biological Concepts and Laboratory 4
PSYC 101 Introduction to Psychology 4
SOCI 101 General Sociology 3
UNIV 111 Focused Inquiry I 3
Total 14

Second semester
BIOL 205 Basic Human Anatomy 4
BIOL 217 Principles of Nutrition 3
UNIV 112 Focused Inquiry II 3
Laboratory science* 4
Total 14

*If high school chemistry (with laboratory) with a minimum grade of C has not been completed, one semester of general chemistry with laboratory (CHEM 101 and CHEZ 101) must be taken. If high school chemistry with a minimum grade of C has been completed, choose from: BIO 201 and BIOZ 201, BIOL 152 and BIOZ 152, BIOL 151 and BIOZ 151, BIOL/ENVS 103, PHYS 101 and PHYIZ 101, or PHYS 107. Additional science must be from the biology, chemistry or physics department and include an additional laboratory component.

Preparation for the study of occupational therapy

The curriculum in pre-occupational therapy meets the minimum academic requirements for the Master of Science degree program in occupational therapy offered by the School of Allied Health Professions at VCU.

Admission to and satisfactory completion of the three-year (90-credit) preparatory program does not constitute admission to the professional program at VCU. In the fall of the year preceding the year of desired admission, the student must apply separately to the VCU professional program through the VCU Graduate School, P.O. Box 843051, Richmond, VA 23284-3051.

Preparation for the study of pharmacy

Students planning on entering pharmacy school must declare a major in addition to a pre-pharmacy concentration. Students intending to enter pharmacy school should plan on completing a bachelor’s degree in addition to the required prerequisite courses. Pre-pharmacy students are encouraged to major in an area of greatest interest to them. Students intending to apply to a professional program at another institution should consult that institution’s bulletin for prerequisite courses to that institution.

Credits earned by examination (AP, CLEP, etc.) will not count toward the 90 minimum credits required for admission to the VCU School of Pharmacy. However, the content area covered by the examination need not be repeated. Electives in related areas may be substituted for the needed credits.

Admission to and satisfactory completion of the preparation program does not constitute or guarantee admission to the final four years of the professional program of the VCU School of Pharmacy. In the fall of the year preceding the year of desired admission, the student must apply separately to the professional program at Virginia Commonwealth University, School of Pharmacy, P.O. Box 980632, Richmond, VA 23298-0632.

Admission into the program is based on scholastic record, PCAT scores, demonstrated aptitude and interest, and a personal interview conducted by the school’s admissions committee. Preference is given to candidates who have successfully completed additional upper-level science courses.

Credits

BIOL and BIOZ 101 Biological Concepts and Laboratory 4
BIOL 205 Basic Human Anatomy 4
BIOL 217 Principles of Nutrition 3
UNIV 112 Focused Inquiry II 3
Laboratory science* 4
Total 14

BIOL and BIOZ 101 Biological Concepts and Laboratory 4
BIOL 201 and BIOZ 201 Human Biology and Laboratory 4
BIOL and BIOZ 152 Introduction to Biological Sciences II and Laboratory 4
BIOL 205 Basic Human Anatomy 4
BIOL 209 Medical Microbiology 3

* It is strongly recommended that students take a visual and performing arts class to develop fine motor skills.
The completion of required courses.
Psychology (including developmental or abnormal).
CHEZ 301 and 302 Organic Chemistry Laboratory I and II
CHEM 403 Biochemistry I
MATH 151 Precalculus Math
MATH 200 Calculus with Analytic Geometry
PHIS 206 Human Physiology
PHYS 201 General Physics
SPCH 121 Effective Speech
STAT 210 Basic Practice of Statistics
UNIV 111 Focused Inquiry I
UNIV 112 Focused Inquiry II
UNIV 200 Writing and Rhetoric Workshop (taken in second year)
Additional electives (chosen with adviser) 24*
Total 90

* Electives should represent a well-balanced program of courses in the fine arts, humanities and social sciences. Choose from anthropology, art history, economics, history, philosophy, political science, psychology, religious studies, sociology, social sciences, foreign languages, literature, music appreciation or computer science. Students may not present studio, activity (physical education), mathematics or science courses. Other electives can include courses in the sciences such as anatomy, physiology and biochemistry.

Preparation for the study of physical therapy

VCU’s Department of Physical Therapy offers a three-year graduate degree program leading to a professional Doctor of Physical Therapy. Students with an interest in preparing for a career in physical therapy should declare an academic major along with a pre-physical therapy advising track. Students cannot earn an undergraduate degree in pre-physical therapy.

Students unsure of their academic majors initially should clarify their academic interests through regular conversations with their advisers. Pre-physical therapy students are encouraged to major in fields of greatest interest to them.

Admission to and completion of a pre-physical therapy program does not constitute admission to the physical therapy program in the School of Allied Health Professions. The student must apply separately to the physical therapy program of his or her choice at the appropriate time.

Prerequisites for admission to the VCU D.P.T. program include:

- A bachelor’s degree.
- Minimum GPA of 2.7.
- A satisfactory score on the general test of the Graduate Record Examination.
- A minimum of 100 volunteer hours in at least two physical therapy practice settings.
- The completion of required courses.

The program course requirements for the VCU D.P.T. program to be completed along with the bachelor’s degree include:

- 12 credits in biological sciences including human anatomy, human physiology with laboratories.
- Eight credits of general chemistry.
- Eight credits of physics.
- Mathematics.
- Statistics.
- Psychology (including developmental or abnormal).

Although not required, students are strongly urged to complete a cell biology course and a vertebrate histology course.

Preparation for the study of radiation sciences

The curriculum in pre-radiation sciences meets the minimum academic requirements for the Bachelor of Science degree program in clinical radiation sciences offered by the VCU School of Allied Health Professions. Radiation sciences offers concentrations in radiography, nuclear medicine technology or radiation therapy.

Admission to and satisfactory completion of the one-year preparation program does not constitute admission to the sophomore year professional program in the School of Allied Health Professions. In the fall of the year preceding the year of desired admission, the student must apply separately to the professional program through the VCU Office of Undergraduate Admissions, P.O. Box 980632, Richmond, VA 23298-0632.

Admission into the program is based on scholastic record, demonstrated aptitude and interest, and a personal interview conducted by the departmental admissions committee.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL and BIZ 101 Biological Concepts and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 205 Basic Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>MATH 141 Algebra with Applications</td>
<td>3</td>
</tr>
<tr>
<td>PSIS and PHIS 206 Human Physiology and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101 Foundations of Physics</td>
<td>3</td>
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<tr>
<td>PHYZ 101 Foundations of Physics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 101 Introduction to Psychology</td>
<td>4</td>
</tr>
<tr>
<td>UNIV 111 Focused Inquiry I</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry II</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
</tr>
</tbody>
</table>

Preparation for professional studies in veterinary medicine and optometry

Special advising programs are offered for several graduate and professional programs that are not offered at VCU, such as the study of veterinary medicine and optometry. The academic advisers are knowledgeable about requirements for admission into these programs including the appropriate course work and other credentials required to be competitive for gaining admission.

A Bachelor of Science program offered on the Monroe Park Campus provides excellent opportunities to complete the necessary prerequisites for application to schools of optometry and veterinary medicine. Interested students are encouraged to pursue a broad background in liberal arts, including sciences, humanities and social sciences. The adviser can assist students to identify schools of optometry and veterinary medicine for specific requirements. In general most schools of optometry require a minimum of 90 credits with courses in biological science, general chemistry, organic chemistry, physics, math, English and general psychology. Admission into veterinary schools generally requires a minimum of 90 credit hours with courses in general biology, general chemistry, organic chemistry, physics, biochemistry, math, English and humanities/social sciences.

Interdisciplinary students and nondegree-seeking students

The UC coordinates and administers degrees for students in the Bachelor of Interdisciplinary Studies program. The B.I.S. provides opportunities for students to combine disciplines in unique ways. Students can apply for a nontraditional, individualized, and interdisciplinary course of study by designing their own curriculum.

The nontraditional program is for students who already have some college credits, and who wish to create an individualized curriculum not available in traditional majors. With advising, students in this undergraduate program are able to design a degree compatible with their academic, career and personal interests. Some students pursue the B.I.S. degree to increase their chances for advancement in their jobs; some realize that the degree will provide personal or job satisfaction; and others want to design a program that will help them change careers. Regardless of the need, each student must define a specific focus area that combines two or more areas of study.

The UC also advises students admitted to VCU with a “nondegree-seeking” status. Undergraduate nondegree-seeking students who have not previously earned a baccalaureate degree may take a maximum of 11 credit hours per semester. Transient students who are seeking a degree at another institution of higher education may take up to 19 credit hours per semester. The nondegree-seeking student advisor helps these students identify appropriate courses for registration according to their educational goals, and also helps with the registration process.

For more information on advising programs, visit the UC Web site or call (804) 827-8648.

Student-athlete support services
The Office of Student Athlete Support Services coordinates academic advising for all student-athletes throughout their enrollment at VCU. This support enhances the opportunities for academic and personal success for student-athletes. The support staff assists students in the development of educational plans, ensures that VCU policies and NCAA rules and regulations regarding academics are being followed, and that students’ needs are successfully being met.

The student-athlete adviser helps student-athletes to understand VCU policies, achieve adequate progress toward graduation, overcome academic difficulties, develop future career goals and maintain NCAA eligibility. Optimal educational and personal success is maximized through tutoring services, study hall, mentoring program and life skills development. All freshmen are required to meet weekly with a team adviser, sophomores meet biweekly and all upperclassmen meet with an adviser at least three times per semester. Student-athletes must meet with their adviser to register for classes each semester.

The Office of Student Athlete Support Services has implemented a unique mentoring program where student-athletes help each other create a strong game plan for success. Each semester, junior and senior student-athletes with a minimum GPA of 3.0 are chosen as mentors. The mentees are freshman student-athletes and any other student-athletes in need of intense individual support. The mentors and mentees are required to meet weekly and create detailed academic plans for the coming week. The mentors are required to attend biweekly training with the staff of the Office of Student-Athlete Advising.

**Advising after the first year**

After the first year and if a student does not fall into one of the special advising populations listed, advising is coordinated through the student’s major program.

**Advising contacts according to major**

<table>
<thead>
<tr>
<th>College of Humanities and Sciences (including humanities, sciences and social sciences majors)</th>
<th>Office of Student Services Hibbs Hall, Room 211</th>
<th>(804) 827-8211</th>
</tr>
</thead>
<tbody>
<tr>
<td>School of Allied Health Professions</td>
<td>Department of Clinical Laboratory Sciences Randolph Minor Annex, Basement 301 College Street</td>
<td>(804) 828-9469</td>
</tr>
<tr>
<td>Department of Radiation Sciences</td>
<td>West Hospital, 6th Floor, West Wing 1200 East Broad Street</td>
<td>(804) 828-9104</td>
</tr>
<tr>
<td>School of the Arts Art Foundation Office of the Director Bowe Street Parking Deck, 5th Floor 609 Bowe Street</td>
<td>(804) 828-1129</td>
<td></td>
</tr>
<tr>
<td>Other advising</td>
<td>Contact major department</td>
<td></td>
</tr>
<tr>
<td>School of Business Office of the Associate Dean for Undergraduate Studies Snead Hall 301 West Franklin Street</td>
<td>(804) 828-3710</td>
<td></td>
</tr>
<tr>
<td>School of Dentistry Division of Dental Hygiene Lyons Building 520 North 12th Street</td>
<td>P.O. Box 980566 (804) 828-9096</td>
<td></td>
</tr>
<tr>
<td>School of Education Office of the Assistant Dean Oliver Hall, Room 2090 1015 West Main Street</td>
<td>(804) 828-3382 or see College of Humanities and Sciences for undergraduate advising within the major</td>
<td></td>
</tr>
</tbody>
</table>

**Health, Physical Education and Exercise Science**

Oliver Hall, Room 1037 1015 West Main Street (804) 828-1948

School of Engineering 601 West Main Street (804) 828-3925

School of Nursing School of Nursing Building, Room 1001 1100 East Leigh Street P.O. Box 980567 (804) 828-5171

School of Social Work Office of the Director for the B.S.W. Program Raleigh Building, Room 103 1001 West Franklin Street (804) 828-0703

The Honors College West Grace Street Student Housing 701 West Grace Street P.O. Box 843010 (804) 828-1803

For additional information, visit www.advising.vcu.edu.

**Academic advising and learning support courses**

The UC offers several academic advising and learning support courses to students, including Introduction to the University; MINDSET for Academic Success; Education and Career Planning; Focused Inquiry I and II; Focused Learning in BIOL 151/152. These courses support students in achieving academic success.

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

**Campus Learning Center**

A learning and tutoring resource, the Campus Learning Center enhances undergraduate students’ academic success at VCU. All CLC services are free for currently enrolled students. Students can schedule both individual and drop-in tutoring sessions in a wide variety of subjects, from courses in business to math and the social sciences.

The CLC also provides Supplemental Instruction, a nationally recognized program that provides learning support from student leaders who work with classroom instructors to make sure each SI session is beneficial. Typical SI offerings include sessions in entry-level sciences and the social sciences. SI offerings change slightly each semester, so students are encouraged to check the Web site for updated offerings as well as meeting times and locations. Focused Learning courses in biology (UNIV 151 and UNIV 152) are graded one- or two-credit courses, which integrate what-to-learn with how-to-learn. Each course is assigned a peer leader who is majoring in biology and has had extensive training in facilitating group study sessions.

The CLC also provides the Campus Testing Center, which offers administration of proctored exams, make-up testing and placement exams. For make-up testing, students must consult with their professors to arrange for tests to be taken in the Campus Testing Center. The professor will then send the exam directly to the test center, and the student will schedule a time to take the exam.

For more information on the Campus Learning Center, visit the CLC on the Web or call (804) 827-8108.

**Writing Center**

The Writing Center offers free writing assistance for undergraduates, graduate students and faculty from any discipline. Consultants trained in the practice of effective writing and writing instruction offer one-on-one sessions to facilitate writers’ work on assignments.

The Writing Center is a collaborative environment designed to help students produce sharper, more critical thinking and a greater sense of audience as they write. Writing Center consultants encourage students to connect with their work, to invest in it and to take better ownership of their thinking and the subsequent
writing that they produce. Weak writing is characterized by weak thinking and exacerbated even more by the distance between the writing task and the student writer. Negotiating this distance is hard work made all the more difficult when students labor in isolation. Working with a consultant the Writing Center helps overcome this isolation and helps students to view their work as meaningful expressions of their thinking.

The Writing Center offers appointments as well as assistance on a drop-in basis. Online services are available to students enrolled in distance learning courses and for students who are otherwise unable to make it to campus for face-to-face consultations.

For more information, visit the Writing Center on the Web or call (804) 827-8108.

Core curriculum
The VCU Core Education Program provides a compact between VCU and its students. The university pledges to provide opportunities for students to improve their oral and written communication competency, to develop their critical thinking abilities, to improve their ability to work collaboratively on projects, to attain information fluency, to achieve quantitative literacy and to understand ethical perspectives and civic responsibilities in the 21st century.

Along with an emphasis on student-centered learning, the primary goals of the Core Education Program are to:

1. Improve students’ levels of competencies in all skill areas.
2. Blend knowledge and skills from different disciplinary areas into one integrated experience.
3. Encourage and promote student engagement in present and future learning.

Mission of the Core: By providing shared learning experiences, the Core Education Program helps students develop competencies necessary for lifelong success.

The Core Education Program consists of 21 credit hours intended to be completed by the end of the sophomore year. Individual schools determine all other curricular requirements for their programs of study. All VCU students are required to take UNIV 111, 112 and 200. A minimum grade of C is required in UNIV 112 and UNIV 200. Transfer credits are not accepted for these courses after a student is enrolled at the university.

The Core Education Program includes three tiers.

Tier I
6 credit hours: UNIV 111 and 112 Focused Inquiry I and II: This two-semester sequence is required of all first-year students and provides the foundation of the Core Education Program. A minimum grade of C is required in UNIV 112. Students begin their Core shared experiences through the summer reading program with follow-through in the FI sequence as they engage in similar assignments and projects both in and out of class.

Tier II
As a complement to the first tier, Tier II courses reinforce the learning objectives introduced in the Focused Inquiry sequence. Courses in this tier are drawn from across the university and include:

1. 3-4 credit hours – a quantitative literacy course from the following approved list:
   - MATH 131 Introduction to Contemporary Mathematics
   - MATH 141 Algebra with Applications
   - MATH 151 Precalculus Mathematics
   - MATH 200 Calculus with Analytic Geometry
   - MGMT 171 Mathematical Applications for Business
   - MGMT 301 Business Statistics
   - STAT 208 Statistical Thinking

2. 3 credit hours – a research and academic writing course that emphasizes academic argument, information retrieval, analysis and documentation. A minimum grade of C is required.
   - UNIV 200 Writing and Rhetoric

3. 3 credit hours – a humanities/fine arts course from the following approved list:
   - ENGL 215 Textual Analysis
   - HIST 201 The Art of Historical Detection: ______
   - HUMS 250 Reading Film
   - MASC/INTL 151 Global Communications
   - PHIL 201 Critical Thinking About Moral Problems
   - PHIL 250 Thinking About Thinking
   - RELS 108 Human Spirituality
   - UNIV 217 Finding Your Voice in Contemporary Society
   - WRLD/INTL 203 Cultural Texts and Contexts: ______
   - WRLD 230 Introduction to World Cinema

4. 3-4 credit hours – a social/behavioral sciences course from the following approved list:
   - ANTH/INTL 103 Cultural Anthropology
   - ECON 101/INTL 102 Introduction to Political Economy
   - HUMS 300 Great Questions of the Social Sciences
   - INTL 101 Human Societies and Globalization
   - POLI 103 U.S. Government
   - POLI/INTL 105 International Relations
   - PSYC 101 Introduction to Psychology
   - SCTS 200 Science in Society: Values, Ethics and Politics
   - SOCY 101 General Sociology
   - UNIV 211 Food for Thought
   - WMNS 201 Introduction to Women’s Studies

5. 3-4 credit hours – a natural/physical sciences course from the following approved list:
   - BIOL 101 Biological Concepts
   - BIOL/ENVS 103 Environmental Science
   - CHEM 110 Chemistry and Society
   - ENVS 201 Earth System Science
   - FRSC 202 Crime and Science
   - INSC 201 Energy!
   - PHYS 103 Elementary Astronomy
   - PHYS 215 Science, Technology and Society

Tier III
The third tier culminates in a capstone experience integrating the Core Education Program with the student’s major. This requirement, as determined by the major, may be fulfilled through a service-learning project, a research project with a faculty member, a study-abroad program, a senior thesis paper, a practical internship or a major-specific capstone course. This requirement ties learned experience in the Core Education Program with a practical application in the major.

New Student Programs and Orientation
The University College offers a number of programs for new students and their families throughout the year. For more information on these programs, visit the UC Web site or call (804) 828-3700.

Orientation
VCU Works
Summer Reading Program
Programs for parents and families
Learning communities

Orientation
The University College offers an orientation program for incoming first-year and transfer students. The New Student Orientation program for first-time freshmen introduces students and their parents to the university, its expectations of them, campus resources, academic programs and courses offered. NSO provides opportunities for new students to interact with faculty, upper-level students and other new students. NSO participants can also meet with faculty members for information about their intended majors.

An important aspect of NSO is academic advising and registration. During advising, students meet with academic advisers to discuss their educational plans.
and course placement, and to choose classes for the first semester. Students also learn how to use the online registration system to register for classes.

NSO sessions are conducted throughout the summer preceding the fall semester and during the week before classes begin for the spring semester. The summer orientation program for new freshmen also includes a supplemental program for parents and other family members. The orientation evening program focusing on student life provides an opportunity to stay overnight in a VCU residence hall.

Transfer students new to VCU also attend an orientation program, which includes an introduction to the university and its resources, an overview of majors, academic advising and registration. During the academic advising portion, students review how credits completed at another institution apply toward general education, major and elective requirements at VCU. Academic advisers also assist transfer students with selecting courses they will take during their first semester and help students to learn the online registration system used to register for classes.

VCU Works

VCU Works provides meaningful on-campus employment opportunities that contribute to students’ integration into the university, academic success and personal development. VCU Works is designed to enhance the probability that students will achieve their educational and personal goals at VCU.

VCU Works is based on the premise that on-campus employment with a mentor who also serves as a supervisor contributes to the academic and social growth of its participants. In addition, VCU Works directly addresses the financial obstacles for students with financial need.

Students must apply to be eligible to participate in the VCU Works program. Participants will receive assistance to find relevant on-campus jobs where they will work up to 20 hours per week. Participants will be expected to attend pre-employment training and ongoing personal development workshops. In addition, they will receive mentoring from their supervisor. Information about the VCU Works program is available from the coordinator located in the UC.

Summer Reading Program

VCU’s Summer Reading Program introduces incoming students to the academic and intellectual culture of the university through a common academic experience. The program and the book, selected by VCU faculty and students during the preceding school year, will be introduced to students while they are on campus for the NSO program. Each student will receive a copy of the book and will be asked to read it and be prepared to discuss its primary themes when they return to campus in August.

During welcome week and throughout the academic year, students will come together to exchange ideas on the book through small group discussions led by a faculty member, university administrator or upper-level student. The discussions not only introduce students to academic dialogue, but they also offer new students the opportunity to establish connections with faculty, staff and their fellow students.

The summer reading program is an important part of students’ transition to university life and provides a shared experience as students begin their educational journey at VCU.

Programs for parents and families of first-year VCU students

Parents and family members play an important role in their college students’ education. VCU believes that college is a collaborative experience among students, their families, and the faculty and staff of the university. The UC associate dean serves as the liaison between the university and parents. Parents may contact the associate dean to address concerns, ask questions and receive assistance on other matters that arise in the college students’ lives during the first year.

Additionally, the UC offers several services for parents to support their first-year college students. Parent orientation is offered during the NSO, with programs geared specifically toward parents and their needs as a college parent. Parents of freshmen also receive a copy of the “Ram Fam,” the parent newsletter, which is mailed to the permanent address that the university has on file for the students. Parents of first-year students can also participate in the Freshman Parent Association and Freshman Parent Council, providing input on parent programming and events. And, parents are encouraged to attend the VCU Fall Fest with activities planned particularly for families.

Learning communities

Learning communities provide a way for first-year students to experience the benefits of a small college environment within a large university setting. Learning communities promote interaction with peers, faculty and UC staff, offer opportunities to become involved in the life of the university and help students achieve greater levels of academic success.

There are two types of learning communities available through the UC. The FIG (Freshman Interest Group) program guarantees students three to four common freshman courses during their first semester. Each FIG has no more than 25 students. Students in the FIG all take UNIV 101 Introduction to the University together as their anchor course. They also co-enroll in two or three additional classes. FIGs give students opportunities to form study groups and develop relationships with 24 other students who share common classes.

Residential villages are a second type of learning community offered. Residential villages allow students who share common academic or personal interests to live together on a particular floor in the freshman residence halls. Village participants also share at least one class during their first semester. The residential villages provide a built-in support system and promote a sense of community among participants.

UC courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to University College (UNIV) courses.

### Health Sciences, Certificate in (Post-baccalaureate undergraduate certificate)

The Post-baccalaureate Undergraduate Health Sciences Certificate is designed for students who hold a baccalaureate degree in a non-science area and wish to pursue their undergraduate pre-health sciences requirements at VCU. The program is intended for students who have few or none of the prerequisites they need to enter doctoral-level programs in physical therapy, pharmacy, dentistry, medicine, osteopathic medicine, optometry or veterinary sciences. This program challenges students to complete more intensive science and math course work than the basic prerequisites and maintain at least a 3.0 cumulative GPA. The certificate program assists students in becoming more competitive for admission into graduate-level programs in the health sciences, but it does not guarantee admission into any program.

Those students completing the certificate are expected to achieve competency in introductory and more advanced-level science courses and will be granted opportunities to gain health care experience. Students can learn about health care program admissions requirements and strengthen their credentials through advising, student-run club activities and seminars.

Depending on the types of courses students complete before entering the program, the certificate can take one to three years to complete with either full- or part-time study. Students are advised on how to progress based on prior math and science course work, work and family constraints, and other factors that could affect the time frame to completion. The certificate program requires the completion of minimal competencies and a core curriculum.

Before beginning the core curriculum, students must show minimum competency by completing or transferring in equivalent courses with minimum grades of B or above for the following: MATH 151, BIOL 151, BHZ 151, BIOL 152, BHZ 152, CHEM 101, CHEZ 101, CHEM 102 and CHEZ 102. Students must have completed all chemistry courses within five years of the time they begin the program in order to apply them toward the minimum competency requirement. The academic requirements to complete the core portion of the program are as follows: a minimum of six undergraduate courses or 25 credit hours in mathematics, statistics, chemistry, biology or physics. All program core courses must be at the 200 level or above. At least three of the courses in the core must have a laboratory.

A maximum of 11 credit hours can be transferred toward the core curriculum of the certificate program. Students must have earned a minimum grade of B in all course work accepted for transfer, which must come from an accredited institution. Students should consult with the pre-health sciences advisers to determine the most appropriate courses to meet their educational and career goals.

Courses will be selected from the following lists:

#### Math and statistics

MATH 200 Calculus with Analytic Geometry
The Bachelor of Interdisciplinary Studies is an individualized and interdisciplinary program for students who cannot find a major at Virginia Commonwealth University that meets their goals. Some students pursue the B.I.S. degree to increase their chances for advancement in their jobs; some realize that the degree will provide personal or professional satisfaction; and others want to design a program that will help them change careers. Students in this undergraduate degree program are able to design an individualized degree compatible with their academic, career or personal needs. This nontraditional program is designed for students who wish to create an individualized curriculum not available in traditional majors. Interdisciplinary studies is intended for students who have clearly articulated goals that cannot be met by existing university programs. The B.I.S. provides opportunities for students to combine disciplines in unique ways.

The application process
To apply to the B.I.S. program, prospective individualized track students must:

• Attend one orientation session
• Have a goal that cannot be met by another degree program at VCU
• Submit an application for review by the adviser of B.I.S., the designated faculty adviser and the dean of University College, detailing a proposed plan for an interdisciplinary course of study that meets university and B.I.S. program requirements

Students apply for nontraditional, individualized and interdisciplinary courses of study by designing their own curricula. The adviser of the B.I.S. program and a faculty adviser assist students in determining the appropriateness of this program, inform students of the B.I.S. curricular guidelines and provide guidance on the application process. With the assistance of the B.I.S. adviser and a designated faculty adviser, students define their educational goals and design their interdisciplinary curricula by drawing on a variety of course offerings. Each student’s plan must define a specific focus area that combines two or more areas of study.

The proposed interdisciplinary curriculum plan will be evaluated by the adviser of the B.I.S. program, the designated faculty adviser and the dean of University College. Each application will be evaluated based on compliance with university degree requirements as well as B.I.S. curriculum and individualized program requirements. Students will be notified in writing of the dean’s decision to accept or deny admission into the program.

After admission to the program, students will follow an approved, finalized, individualized curriculum plan. The finalized curriculum plan is the official permanent record of the student’s degree requirements and this must be approved by the adviser of B.I.S., the designated faculty adviser and the dean of University College. This document records all transfer credits applicable to the B.I.S. degree and lists the courses required to complete the degree.

Individualized program requirements

Core education requirements:

A. Writing and research

6 credit hours: UNIV 111, 112 Focused Inquiry I, II – This two-semester sequence is required of all first-year students and provides the foundation of the Core Education Program. Students begin their Core shared experiences through the summer reading program with follow-through in the FI sequence as they engage in similar assignments and projects both in and out of class.

3 credit hours: A research and academic writing course that emphasizes academic argument, information retrieval, analysis and documentation. UNIV 200 may be used to fill this requirement or an equivalent course designed by the department/school.

B. Quantitative literacy

3 credit hours: A quantitative literacy course from following list of approved courses

MATH 131 Introduction to Contemporary Mathematics
MATH 141 Algebra with Applications
MATH 151 Pre-calculus Mathematics
MATH 200 Calculus with Analytic Geometry

Interdisciplinary Studies, Bachelor of (B.I.S.) [University College]
MGMT 171 Mathematical Applications for Business
STAT 208 Statistical Thinking

C. Core general education

9 credits: Including one course from each of the following areas:

1. Natural/physical sciences
   BIOL 101 Biological Concepts
   BIOL/ENVS 103 Environmental Science
   CHEM 110 Chemistry and Society
   ENVS 201 Earth System Science
   FRSC 202 Crime and Science
   INSC 201 Energy!
   PHYS 103 Elementary Astronomy

2. Humanities/fine arts
   ENGL 215 Textual Analysis
   HIST 201 The Art of Historical Detection
   HUMS 250 Reading Film
   MASC/INTL 151 Global Communication
   PHIL 201 Critical Thinking
   PHIL 250 Thinking About Thinking
   RELS 108 Human Spirituality
   WRLD/INTL 203 Cultural Texts and Contexts
   WRLD 230 Introduction to World Cinema

3. Social/behavioral sciences
   ANTH/INTL 103 Cultural Anthropology
   ECON 101/INTL 102 Introduction to Political Economy
   HUMS 300 Great Questions of the Social Sciences
   INTL 101 Human Societies and Globalization
   POLI 103 U. S. Government
   POLI/INTL 105 International Relations
   PSYC 101 Introduction to Psychology
   SOCY 101 General Sociology
   WMNS 201 Introduction to Women’s Studies

D. Additional general education requirements

9 credit hours: Select at least 3 courses offered by the College of Humanities and Sciences that are not required in your focus area.

E. Capstone course

3 credit hours: This requirement may be fulfilled through a service-learning project, a research project with a faculty member, a study abroad program, a senior thesis paper or a practical internship. This requirement ties learned experience in the Core Education Program with a practical application and will be completed through an upper-level course in the student’s focus area. Students may use the capstone in either of their minor areas or they can propose a unique capstone appropriate for their focus area.

Focus area

The individually designed interdisciplinary focus area requires a minimum of 36 semester credits, 24 of which must be upper-level credit. The focus area has to combine at least two areas of study. One way to accomplish this is to complete the requirement for two minors as designated in the Undergraduate Bulletin.

Electives

Maximum of 57 credits

Other requirements

The curriculum plan must also meet the following university policies and degree requirements:

- No more than 63 semester hours may be from two-year colleges (e.g., junior or community colleges).
- No more than 30 semester hours in applied science credit from a transfer institution in a nontraditional area (e.g., early childhood education, horticulture, hotel and restaurant management) can be used toward the degree, and it must be transferred as part of the focus area.

- B.I.S majors are required to participate in assessment activities (e.g., focus groups and exit surveys) as determined by the B.I.S. adviser. Assessment information is used to assist faculty in evaluating program effectiveness. Students have a variety of credit options, including CLEP examinations, credit for formal military training and credits for certain professional certifications when they do not duplicate college course work.
The faculty and staff of the College of Humanities and Sciences are dedicated to excellence in teaching, research and public service. The mission of Virginia Commonwealth University provides the framework for this pursuit of excellence. Teaching and learning are central to the college, and the college is central to educational and intellectual life at VCU. The college meets the educational needs of a diverse student body, provides general education for all undergraduate students of the university, preparatory programs for the health sciences, engineering and law, and educates future teachers in the liberal arts and sciences. The college offers comprehensive undergraduate, graduate and professional programs of study that link a foundation of understanding and knowledge with skills on which students can build careers, become responsible citizens and continue lifelong learning.

Scholarship, creative work and professional accomplishment are essential to teaching and learning. The college is responsible for advancing understanding and increasing knowledge for its own sake, for the educational benefit of its students, and for the good of the larger community.

In both teaching and research, the College of Humanities and Sciences seriously upholds the responsibilities of being part of a public, metropolitan university. Through service and public teaching, the college meets the challenges and opportunities afforded by VCU’s urban environment and by its location in the capital of the commonwealth.

The college achieves national and international recognition through the success of its students, the advancement of the disciplines and professions represented by its programs, and through the individual and collaborative research of its faculty.

### Administration

828 West Franklin Street
P.O. Box 842019
Richmond, Virginia 23284-2019
(804) 828-1674
Fax: (804) 828-1576
www.has.vcu.edu

James Coleman
Professor and Dean

Alison Baski
Professor and Executive Associate Dean

Kevin Allison
Associate Professor and Associate Dean for Community Activities

James Mays
Associate Professor and Associate Dean for Undergraduate Academic Affairs

### History

The College of Humanities and Sciences was organized in 1966 (then the School of Arts and Sciences) as a combination of several existing departments at Richmond Professional Institute: Biology, Chemistry, English, Foreign Languages, and History and Political Science. The departments of Philosophy and Religious Studies, Mathematical Sciences, Physics, Psychology, Sociology and Anthropology, and Political Science were developed or added subsequently.

Arts and Sciences began its first graduate programs in 1969 with master’s programs in psychology and sociology. Master’s programs in biology and mathematical sciences and a doctoral program in clinical psychology were soon to follow in 1971. In 1974, English/English education began a master’s program offered cooperatively by the Department of English and the Division of Teacher Education of the School of Education. In that same year the graduate program in chemistry, a cooperative venture between the departments of Chemistry on the Monroe Park Campus and Pharmaceutical Chemistry on the MCV Campus, was transferred administratively to the School of Arts and Sciences. Beginning in 1976, a master’s degree was created in mass communications, while in 1978, a doctoral program in social policy and social work started in cooperation between the Department of Sociology and Anthropology and the School of Social Work.

In July 1981, the School of Arts and Sciences and the Department of Mass Communications were organized into the College of Humanities and Sciences and the School of Mass Communications. The Master of Fine Arts in Creative Writing commenced in 1983 followed by the M.S. in Physics in 1984. Three years later, the Department of Mathematical Sciences established the M.S. in Computer Science program, and finally, a master’s degree in history was initiated in 1994 through the Department of History.

Effective July 1, 1994, the departments of Criminal Justice, Public Administration and Urban Studies joined the college from the dissolved School of Community and Public Affairs. Each department brought to the college both master’s and post-baccalaureate certificate programs within their disciplines. The Public Administration program was merged with the Political Science program to form the Department of Political Science and Public Administration. The Ph.D. in Public Administration program was initially incorporated into the newly merged department and now resides in the Center for Public Policy.

### Accreditation

Chemistry (bachelor’s degree)
The American Chemical Society

Psychology (doctoral degrees: clinical, counseling)
American Psychological Association

Public Administration (master’s degree)
National Association of Schools of Public Affairs and Administration

Urban and Regional Planning (master’s degree)
Planning Accreditation Board

### Undergraduate information

#### Undergraduate degree programs

The College of Humanities and Sciences offers baccalaureate degrees in 24 areas:

- African American Studies – B.A.
- Anthropology – B.S.
- Biology – B.S.
- Chemistry – B.S.
- Criminal Justice – B.S.
  - forensic crime scene investigation
  - justice
- Economics – B.S.
- English – B.A.
- Foreign Language – B.A.
  - French
  - German
  - Spanish
  - world film studies
- Forensic Science – B.S.
- Gender, Sexuality and Women’s Studies – B.A.
- History – B.A.
- Interdisciplinary Studies – B.I.S.
  - liberal studies for early and elementary education
- International Studies – B.A.
  - area studies
  - global studies
- Mass Communications – B.S.
  - advertising
  - journalism
  - broadcast
  - print
  - public relations
- Mathematical Sciences – B.S.
  - applied mathematics
  - biomathematics
  - mathematics
  - operations research
  - secondary teacher preparation
  - statistics
- Philosophy – B.A.
  - ethics and public policy
- Physics – B.S.
- Political Science – B.A.
- Psychology – B.S.
- Religious Studies – B.A.
- Science – B.S.
biology
chemistry
health preparation/professional science
physics
Sociology – B.S.
Urban and Regional Studies – B.S.
generalized
regional analysis and development
urban planning and policy

Information concerning curricula is given in the individual program descriptions.

Minors and certificate programs

In addition to a major, a student may elect a minor area of study in any program or department offering such a program. The minor can be used to fulfill career needs or serve as a means for the student to study a discipline of secondary interest.

Students interested in pursuing a minor should discuss their intentions with their advisers or the chair of the major department. When the student decides on a minor, a Change of Major/Minor form must be completed in the Office of Records and Registration. When the student files for graduation, the student must complete the Minor Application along with the Graduation Application.

Courses for the minor should be chosen from courses approved by departments offering minors in their areas. Generally, students cannot minor in the same area as their major.

A minor designation on the transcript requires a minimum of 18 credit hours and a minimum 2.0 GPA must be achieved in the minor. Prerequisites for courses are stated under course descriptions in the VCU Courses database online at www.pubinfo.vcu.edu/vcucourses.

Detailed descriptions of each minor and certificate program appear in this bulletin. Minors are offered in the following areas:

- African American studies
- African studies
- American studies
- anthropology
- Arabic and Middle Eastern studies
- Asian and Chinese studies
- biology
- British studies
- Catholic studies
- chemistry
- creative writing
- criminal justice
- economics
- English
- European studies
- French
- gender, sexuality and women’s studies
- German
- history
- homeland security and emergency preparedness
- international social justice studies
- Islamic studies
- Italian studies
- Judaic studies
- Latin American studies
- mathematical sciences
- media studies
- Mediterranean studies
- nonprofit management and administration
- philosophy
- philosophy of law
- physics
- political science
- psychology
- public management
- religious studies
- Russian studies
- sociology
- Spanish
- statistics

Urban and regional studies
world cinema
writing
Undergraduate certificates are awarded in the following areas and levels:

- international management studies (baccalaureate certificate, in conjunction with the School of Business)
- Spanish/English translation and interpretation (baccalaureate certificate)
- statistics (post-baccalaureate undergraduate certificate)

Teacher preparation

Students in the college can apply to the Extended Teacher Preparation Program sponsored jointly with the School of Education. This program awards both a bachelor’s degree from the College of Humanities and Sciences and a master’s degree from the School of Education. Students who successfully complete this program will be certified to teach in early childhood, middle or secondary education.

Additional information on this five-year program is available at the School of Education’s Office of Student Services in Room 3106, Oliver Hall, or by calling (804) 827-2670. A more thorough description of this program is found under the “School of Education” section of this bulletin and in the Extended Teacher Preparation Handbook available from the School of Education’s Department of Teaching and Learning or the College of Humanities and Sciences Dean’s Office.

Information about VCU students’ performances on the state-mandated licensure tests (Praxis I: Reading, Writing and Mathematics and Praxis II: Specialty Area Tests) is available on the School of Education Web site: www.soe.vcu.edu.

Educational goals

The ultimate goal of a liberal arts education is to help students develop the abilities to think and continue their learning. These skills will aid students as they take their places in a world dominated by change. These abilities also will aid students in their future endeavors as they encounter problems, whether in their personal or professional lives, or in their communities. Graduates of the College of Humanities and Sciences are broadly educated, not simply trained, allowing them to function as understanding participants in events rather than as spectators or even victims of those events.

To achieve this goal, the faculty of the College of Humanities and Sciences has identified the following specific requirements.

- Students should write well, organize their ideas, support them and communicate them clearly and effectively.
- Students should reason logically and be able to quantify experiences.
- Students should have knowledge of the fundamental ideas and methods of the natural sciences.
- Students should be able to analyze ethical conflicts.
- Students should have an understanding of literature and the other arts.
- Students should have knowledge of American heritage and those of other cultures, along with an introduction to a foreign language.
- Students should have a basic knowledge of human behavior and social, political and cultural institutions.

Academic advising

All freshmen majoring in areas offered within the College of Humanities and Sciences are advised through the University College. Please refer to the “University College” section of this bulletin for further information on the first-year advising program. After attaining sophomore standing, students within the college receive academic advising from within the department or school of their majors. The advising system for each department and school varies somewhat; however, each student is assigned an adviser according to their program of study. Students are encouraged to take full advantage of the educational and career-planning assistance provided by their assigned faculty advisers. Ultimate, students are responsible for understanding all university and college requirements needed to earn a degree and for seeking out academic advising on a regular basis.

The academic advisors provide assistance with interpreting policies, requirements and regulations, maximizing academic success and enriching the overall undergraduate educational experience.

Graduation requirements
For students majoring in a four-year bachelor’s degree program within the College of Humanities and Sciences (including students in the pre-dental, pre-medical, pre-optometry, pre-veterinary and extended teacher preparation program classifications), there are four areas of requirements that the student must complete for graduation:

1. Undergraduate Core Education Program requirements
2. General education requirements of the College of Humanities and Sciences (see departmental major sections for collateral requirements)
3. Departmental major requirements
4. Electives to complete the total of a minimum of 120 credits

General education requirements for undergraduate study

All baccalaureate degree programs require students to complete a minimum of 120 credits. No more than four of those credits can be physical education/activity courses. See program descriptions for exact number of major credits (30 credit minimum) and elective courses to complete the total required 120 credits.

General education requirements for bachelor’s degrees within the College of Humanities and Sciences

The purpose of general education courses in the College of Humanities and Sciences is to provide a foundation for lifelong learning among its students. This foundation includes the six core competencies of written communication, oral proficiency, critical thinking, information fluency, ethical and social responsibility and quantitative literacy.

The College of Humanities and Sciences’ general education curriculum encourages students to pursue multiple interests simultaneously and creates opportunities for connecting learning across courses, disciplines and contexts. Additionally, it provides students with effective communication skills, the ability to analyze situations and think critically about the world around them, locate and analyze information to make informed decisions, and integrate knowledge from multiple perspectives and disciplines. The College of Humanities and Sciences’ general education curriculum proposes to foster academic community by linking the liberal arts and professional learning, and provides a strong foundation of knowledge, skills and experiences that are the hallmark of a VCU undergraduate education.

The College of Humanities and Sciences’ general education program totals 33-48 credit hours (hours vary according to foreign language placement and variations in individual course credit hours). The general education program includes three distinct tiers plus a senior capstone experience that is part of the major requirements.

Foundational courses: 12 credit hours

Foundational courses lay the groundwork for developing skills in the six identified competencies and lay the groundwork for future learning. (These courses satisfy a portion of the University Core Curriculum.)

UNIV 111 Focused Inquiry I
UNIV 112 Focused Inquiry II
UNIV 200 Writing and Rhetoric or academic research writing

Math and statistics:

Complete one of the following courses: MATH 131 Introduction to Contemporary Mathematics, STAT 208 Statistical Thinking or a 100- or 200-level MATH or STAT course (except MATH 121, 122, 123) as listed on the major curriculum worksheet guide and recommended by the academic adviser.

Supporting courses: 18-21 credit hours

Supporting courses further develop the core competencies while providing a vehicle for intellectual inquiry within specific areas of study. Students must complete at least 18 credits (comprised of at least six courses) by successfully taking at least one course and no more than two in each of the following four categories.

1. Human, social and political behavior

These courses are designed to deepen students’ understanding of the study of society and the behavior of its citizens in various contexts.

ANTH/INTL 103 Introduction to Anthropology
ECON 101/INTL 102 Introduction to Political Economy
HUMS 300 Great Questions of the Social Sciences
POLI 103 U.S. Government
PSYC 101 Introduction to Psychology (4 credits)
SCTS 200 Science in Society: Values, Ethics and Politics
SOCY 101 General Sociology

2. Science and technology

These courses are designed to enhance students’ literacy in science and technology, including an understanding of the natural world, experience with the fundamental ideas and methods of the sciences and greater scientific literacy, particularly in relation to energy, evolution and evaluation.

BIOL 101 Biological Concepts (3 or 4 credits)
BIOL/ENVS 103 Environmental Science (4 credits)
CHEM 110 Chemistry and Society
FRSC 202 Crime and Science
INSC 201 Energy!
PHYS 103 Elementary Astronomy

3. Diverse and global communities

These courses are designed to provide students with an understanding of communities, cultures and identities other than their own, and with the ability to apply methods of inquiry from various academic disciplines to the understanding of diverse cultures and societies and the interactions among them.

INTL 101 Human Societies and Globalization
MASC/INTL 151 Global Communications
POLI/INTL 105 International Relations
RELS 108 Human Spirituality
WMNS 201 Introduction to Women’s Studies

4. Literature and civilization

These courses are designed to help students explore the relationships between human expression (in texts, films and material culture) and human societies, as well as between the present and the past.

ENGL 215 Textual Analysis
HIST 201 The Art of Historical Detection: ______
HUMS 250 Reading Film
PHIL 201 Critical Thinking About Moral Problems
WRLD/INTL 203 Cultural Texts and Contexts: ______
WRLD 230 Introduction to World Cinema

Experiential courses: 2-12 credit hours

These courses complement the other areas of inquiry by providing practical and experientially based knowledge both within and outside of the traditional classroom setting.

Foreign language (0-8 credits)
The study of a foreign language enhances students’ appreciation for and knowledge of other cultures. Students who have studied a foreign language have cognitive development, creativity and divergent thinking. Students must complete a foreign language through the 102 level or equivalent through credit, placement testing or other demonstrated proficiency.

Experiential fine arts (1-3 credits)
Students involved in the fine arts gain a greater understanding of the cultural and aesthetic possibilities of the world around them. Students satisfy this requirement by the completion of one course offered by the School of the Arts.

HUMS 202 Choices in a Consumer Society (1 credit)
An online personal finance course focusing on participatory, application-based exercises designed to arm students with the ability to make educated decisions in relation to future financial choices such as payment of student loans, understanding credit card statements, applying for mortgages, credit rating and planning for retirement.

Senior capstone: 1-3 credit hours

This course provides a discipline-specific culminating intellectual experience. Students must take at least 1 credit of a senior capstone experience within the major. Students must have senior status (at least 85 credit hours toward graduation) when completing this requirement.
Department of African American Studies

Shawn Utsey
Associate Professor and Department Chair
www.has.vcu.edu/aas

The Department of African American Studies at Virginia Commonwealth University provides an educationally rich environment in which students and scholars research, learn and teach about the past and present realities of people of African descent. Employing a wide range of theories, perspectives, methods and tools, African American Studies faculty enjoy social, political, economic and cultural realities and connections between the experiences of persons in Africa and throughout the African Diaspora. The department emphasizes experiential learning, offers study abroad opportunities and internships.

African American studies courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to African American studies (AFAM) courses.

African American Studies, Bachelor of Arts (B.A.)

The Bachelor of Arts in African American Studies gives students the opportunity to pursue a liberal education consistent with their intellectual interests and career goals. This program prepares students for graduate studies in African American studies and other fields. African American studies majors interested in teaching careers at the middle school level can enroll in the Extended Teacher Preparation Program provided they have fulfilled the requirements of a minor in any of the sciences, mathematics, English, history or political science. Eligibility to teach at the secondary level requires African American studies majors to complete a second liberal arts major in the subject they plan to teach.

Degree requirements – Bachelor of Arts in African American Studies

Students majoring in African American studies must meet the general education requirements of the College of Humanities and Sciences.

The Bachelor of Arts in African American Studies requires the completion of 120 credits with at least 36 credits in African American studies courses. The 36 credits in African American studies must include AFAM 103, AFAM 208, AFAM 308, AFAM 408 and AFAM 416. At least 21 of the 36 credits in African American studies must be in upper-division courses. Students are required to take at least one approved course pertinent to each of the following geographical regions: (1) Africa, (2) North America and (3) Latin America or the Caribbean.

Students also are required to establish a concentration by taking either a minimum of four courses in the African American health area of study or four courses in a single cooperating department. Required courses in the African American health area of study are AFAM 310, AFAM 322 or AFAM 309, AFAM 394, and AFAM 494. A cooperating department or program is defined as one that regularly offers at least one cross-listed course per year, which includes: Anthropology, Criminal Justice, Dance, English, Geography, History, Mass Communications, Music, Philosophy, Political Science, Psychology, Religious Studies, Sociology, Theatre, and Women’s Studies. When courses not cross-listed with African American Studies are used to meet the concentration requirement, they must be selected in consultation with the African American studies advisor.

African American studies, minor in

The minor in African American studies requires a minimum of 18 credits. Students must complete AFAM 103 Introduction to African American Studies, and at least one course dealing with Africa, African Americans, and African and African-American arts. Courses in African American studies are designed to help students gain a knowledge and appreciation of the history and culture of Africans and African Americans and their contributions to world civilizations.

Department of Biology

The Department of Biology offers programs leading to baccalaureate, master’s and doctoral degrees; the doctoral degree is offered through the Integrative Life Sciences program. Students may specialize within many areas, such as molecular and cellular biology, genetics, aquatic and terrestrial ecology, systematics, physiology, neurobiology, and developmental biology. Students also may develop an interdisciplinary focus to their degree program, for example within areas such as bioinformatics, cancer biology, forensic science and environmental science.

In addition to the courses offered by the Department of Biology, graduate students may enroll in graduate courses offered through VCU Life Sciences and these departments at the VCU Medical Center: Anatomy and Neurobiology, Biochemistry, Biostatistics, Human and Molecular Genetics, Microbiology and Immunology, Pathology, Pharmacology and Toxicology, and Physiology and Biophysics. Visit the Department of Biology’s Web site: www.has.vcu.edu/bio.

Administration

Donald R. Young
Professor and Department Chair

Jennifer K. Stewart
Associate Professor and Director of Graduate Studies

www.has.vcu.edu/bio

Biology courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

The following courses do not apply toward the major in biology: BIOL 101, BIOL 101, BIOL/ENVS 103, BIOL 201, BIOL 201, BIOL 205, BIOL 205, PHIS 206, PHIS 206, BIOL 209, BIOL 209, BIOL 217, and BIOL 332. A C grade or better in each prerequisite course is required for enrollment in all biology courses BIOL 205 or higher that have prerequisites listed in their course descriptions.

Follow these links to biology (BIOL) courses or the (BIOZ) laboratories.

Biology, Bachelor of Science (B.S.)

The four-year curriculum in biology prepares students for graduate study in biology, for employment in laboratory or field programs in private industry or government agencies and for teaching in secondary schools. This curriculum also prepares students for admission into schools of medicine, dentistry and veterinary medicine, and into allied health programs.

Degree requirements – Bachelor of Science in Biology

Transfer students

Extended Teacher Preparation Program

Honors in biology

Degree requirements Bachelor of Science in Biology

The curriculum for a Bachelor of Science in Biology requires a minimum of 120 credits, with at least 40 of those credits in biology or other approved courses. A cumulative GPA of 2.0 for biology courses is required. At least six laboratory experiences must be taken from all biology courses; only one of these may be BIOL 492 Independent Study or BIOL 495 Research and Thesis. Registration in BIOL 492 or 495 must be for a minimum of two credit hours to count as one of the six required laboratory experiences. No more than eight credits of the 100-level (or introductory level) biology courses can be applied to the major.

Collateral requirements. The following requirements must be fulfilled by all majors:

Mathematics: Majors must take or place out of MATH 151 Precalculus Mathematics and take STAT 210 Basic Practice of Statistics and one additional course from the following options (or the equivalent):

1. A statistics (STAT) course numbered 314 or above
2. MATH 200 Calculus with Analytic Geometry I

All students enrolling in a mathematics, statistics or computer science course must satisfy the prerequisites for the course before enrolling in the course. The prerequisites may be satisfied either by placement into the course based on the results of either the VCU Mathematics Placement Test or by successful completion of the prerequisite course. Depending on the test results, students may...
be placed in MATH 141 or MATH 151 before being admitted into one of the courses listed above.

Chemistry: The Department of Biology requires students to meet the Department of Chemistry’s course requirement of a minimum grade of C in all prerequisite courses.

CHEM 101-102 and CHEZ 101 and 102 General Chemistry and Laboratory I and II
CHEM 301-302 and CHEZ 301 and 302 Organic Chemistry and Laboratory I and II

Physics: Students must complete one of the following options:
1. PHYS 201-202 General Physics
2. PHYS 207 University Physics I and PHYS 208 University Physics II

**Biocore.** The following courses must be taken by all biology majors. A minimum grade of C in BIOL 151, 152, BIOZ 151, 152, BIOL 218, BIOL 310 and BIOL 317 is required for enrollment in all courses for which they are prerequisites and to successfully complete the B.S. in Biology.

BIOL 151, 152 Introduction to Biological Science I, II
BIOZ 151, 152 Introduction to Biological Science Laboratory I, II
BIOL 218 Cell Biology
BIOL 310 Genetics
BIOL 317 Ecology
Biology capstone (either BIOL 475 Biology Capstone Seminar, BIOZ 476 Biology Capstone Laboratory or BIOL 477 Biology Capstone Experience)

**Biology electives.** Select from all biology (BIOL and BIOZ) courses applicable to the biology major and biochemistry (CHEM 403). All majors must complete at minimum:

- One course (3 or more credits) from the animal group
- One course (3 or more credits) from the plant group
- Six laboratory experiences, including one in the animal or plant group
- Additional courses from the animal or plant groups, or other biology electives, to satisfy the 40 biology credits required for the major

The laboratory experience may be fulfilled by a separate laboratory section (BIOZ) or by laboratory hours included in a lecture-based (BIOL) course. Not all courses are offered each semester. BIOL courses at the 500 level are available to seniors and graduate students only.

Animal group
BIOL 301 Comparative Vertebrate Anatomy
BIOL 302 Animal Embryology
BIOL 309 Entomology
BIOL 312 Invertebrate Zoology
BIOZ 312 Invertebrate Zoology Laboratory
BIOL 313 Vertebrate Natural History
BIOZ 313 Vertebrate Natural History Laboratory
BIOL 391 Topics in Biology (as approved)
BIOZ 391 Topics in Biology Laboratory (as approved)
BIOL 416 Ornithology
BIOZ 416 Ornithology Laboratory
BIOL 417 Mammalogy
BIOL 435 Herpetology
BIOL 445 Neurobiology and Behavior
BIOL 503 Fish Biology

Plant group
BIOL 320 Biology of the Seed Plant
BIOL 321 Plant Development
BIOZ 321 Plant Development Laboratory
BIOL 322 Economic Botany
BIOL 323 Plant Physiology
BIOL 391 Topics in Biology (as approved)
BIOZ 391 Topics in Biology Laboratory (as approved)

Other biology electives
BIOL 291 Topics in Biology
BIOL 292 Independent Study
BIOL 303 Bacteriology
BIOZ 303 Bacteriology Laboratory

**Physics: Students must complete one of the following options:**
1. PHYS 201-202 General Physics
2. PHYS 207 University Physics I and PHYS 208 University Physics II

**Biocore.** The following courses must be taken by all biology majors. A minimum grade of C in BIOL 151, 152, BIOZ 151, 152, BIOL 218, BIOL 310 and BIOL 317 is required for enrollment in all courses for which they are prerequisites and to successfully complete the B.S. in Biology.

BIOL 151, 152 Introduction to Biological Science I, II
BIOZ 151, 152 Introduction to Biological Science Laboratory I, II
BIOL 218 Cell Biology
BIOL 310 Genetics
BIOL 317 Ecology
Biology capstone (either BIOL 475 Biology Capstone Seminar, BIOZ 476 Biology Capstone Laboratory or BIOL 477 Biology Capstone Experience)

**Biology electives.** Select from all biology (BIOL and BIOZ) courses applicable to the biology major and biochemistry (CHEM 403). All majors must complete at minimum:

- One course (3 or more credits) from the animal group
- One course (3 or more credits) from the plant group
- Six laboratory experiences, including one in the animal or plant group
- Additional courses from the animal or plant groups, or other biology electives, to satisfy the 40 biology credits required for the major

The laboratory experience may be fulfilled by a separate laboratory section (BIOZ) or by laboratory hours included in a lecture-based (BIOL) course. Not all courses are offered each semester. BIOL courses at the 500 level are available to seniors and graduate students only.

Animal group
BIOL 301 Comparative Vertebrate Anatomy
BIOL 302 Animal Embryology
BIOL 309 Entomology
BIOL 312 Invertebrate Zoology
BIOZ 312 Invertebrate Zoology Laboratory
BIOL 313 Vertebrate Natural History
BIOZ 313 Vertebrate Natural History Laboratory
BIOL 391 Topics in Biology (as approved)
BIOZ 391 Topics in Biology Laboratory (as approved)
BIOL 416 Ornithology
BIOZ 416 Ornithology Laboratory
BIOL 417 Mammalogy
BIOL 435 Herpetology
BIOL 445 Neurobiology and Behavior
BIOL 503 Fish Biology

Plant group
BIOL 320 Biology of the Seed Plant
BIOL 321 Plant Development
BIOZ 321 Plant Development Laboratory
BIOL 322 Economic Botany
BIOL 323 Plant Physiology
BIOL 391 Topics in Biology (as approved)
BIOZ 391 Topics in Biology Laboratory (as approved)

Other biology electives
BIOL 291 Topics in Biology
BIOL 292 Independent Study
BIOL 303 Bacteriology
BIOZ 303 Bacteriology Laboratory

**Physics: Students must complete one of the following options:**
1. PHYS 201-202 General Physics
2. PHYS 207 University Physics I and PHYS 208 University Physics II

**Biocore.** The following courses must be taken by all biology majors. A minimum grade of C in BIOL 151, 152, BIOZ 151, 152, BIOL 218, BIOL 310 and BIOL 317 is required for enrollment in all courses for which they are prerequisites and to successfully complete the B.S. in Biology.

BIOL 151, 152 Introduction to Biological Science I, II
BIOZ 151, 152 Introduction to Biological Science Laboratory I, II
BIOL 218 Cell Biology
BIOL 310 Genetics
BIOL 317 Ecology
Biology capstone (either BIOL 475 Biology Capstone Seminar, BIOZ 476 Biology Capstone Laboratory or BIOL 477 Biology Capstone Experience)

**Biology electives.** Select from all biology (BIOL and BIOZ) courses applicable to the biology major and biochemistry (CHEM 403). All majors must complete at minimum:

- One course (3 or more credits) from the animal group
- One course (3 or more credits) from the plant group
- Six laboratory experiences, including one in the animal or plant group
- Additional courses from the animal or plant groups, or other biology electives, to satisfy the 40 biology credits required for the major

The laboratory experience may be fulfilled by a separate laboratory section (BIOZ) or by laboratory hours included in a lecture-based (BIOL) course. Not all courses are offered each semester. BIOL courses at the 500 level are available to seniors and graduate students only.

Animal group
BIOL 301 Comparative Vertebrate Anatomy
BIOL 302 Animal Embryology
BIOL 309 Entomology
BIOL 312 Invertebrate Zoology
BIOZ 312 Invertebrate Zoology Laboratory
BIOL 313 Vertebrate Natural History
BIOZ 313 Vertebrate Natural History Laboratory
BIOL 391 Topics in Biology (as approved)
BIOZ 391 Topics in Biology Laboratory (as approved)
BIOL 416 Ornithology
BIOZ 416 Ornithology Laboratory
BIOL 417 Mammalogy
BIOL 435 Herpetology
BIOL 445 Neurobiology and Behavior
BIOL 503 Fish Biology

Plant group
BIOL 320 Biology of the Seed Plant
BIOL 321 Plant Development
BIOZ 321 Plant Development Laboratory
BIOL 322 Economic Botany
BIOL 323 Plant Physiology
BIOL 391 Topics in Biology (as approved)
BIOZ 391 Topics in Biology Laboratory (as approved)

Other biology electives
BIOL 291 Topics in Biology
BIOL 292 Independent Study
BIOL 303 Bacteriology
BIOZ 303 Bacteriology Laboratory

**Courses not applicable to the major:** The following courses are not applicable toward the biology major requirements, but may be used as general electives toward the bachelor’s degree:

BIOL 101 Biological Concepts
BIOZ 101 Biological Concepts Laboratory
BIOL 103 Environmental Science
BIOL 201 Human Biology
BIOL 201 Human Biology Laboratory
BIOL 205 Basic Human Anatomy
BIOL 209 Medical Microbiology
BIOZ 209 Medical Microbiology Laboratory
BIOL 217 Principles of Nutrition
PHIS 206 Human Physiology
PHIZ 206 Human Physiology Laboratory

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Transfer students
Transfer students intending to major in biology must satisfy all biology major course requirements and complete a minimum of 15 credits of VCU biology courses at the 300-, 400- or 500-level.

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Extended Teacher Preparation Program
Biology majors interested in teaching careers in secondary education can enroll in the Extended Teacher Preparation Program, which simultaneously awards a bachelor’s degree in biology and a master’s degree in teaching. For more information about this program, jointly administered by the College of Humanities and Sciences and the School of Education, contact the School of Educations Student Services Center.

Honors in biology
Biology majors may graduate with honors in biology. To qualify, students must have overall and biology GPAs of at least 3.5 and must complete the following courses in this sequence: BIOL 392 Introduction to Research, at least four credits of BIOL 495 Research and Thesis and BIOL 490 Research Seminar. Grades of A or B must be earned in each of the listed courses. Students who qualify will have the notation “Honors in Biology” placed on their transcript. Students must meet all Department of Biology requirements for graduation. Students should consult with their academic advisers to create a program suitable to their particular needs and interests.

Biology, minor in
The minor in biology requires a minimum of 20 credits in biology, including the biology core courses: BIOL 151, 152 Introduction to Biological Science I, II; BIOZ 151, 152 Introduction to Biological Science Laboratory I, II; BIOL 218 Cell Biology; BIOL 310 Genetics; and BIOL 317 Ecology. Also required are an additional three credits in biology at the upper level and three biology laboratory experiences, including BIOZ 151 and 152, but not including BIOL 492 Independent Study or BIOL 495 Research and Thesis. Only courses applicable toward the B.S. in Biology can be applied toward the minor in biology. For a list of approved biology electives, see "Biology, Bachelor of Science (B.S.)” in the Undergraduate Bulletin.

Students are required to complete each of the biology core courses (listed above) with a minimum grade of C. A minimum GPA of 2.0 is required for all courses applicable to the minor. A minimum of nine upper-level biology credits must be taken at VCU.

Department of Chemistry
The Department of Chemistry offers programs leading to the Bachelor of Science, Master of Science and Doctor of Philosophy degrees. For undergraduate students, the Bachelor of Science offers concentrations in chemical science, professional chemist, professional chemist with honors, biochemistry and chemical modeling.

For graduate students, the Master of Science and Doctor of Philosophy programs provide opportunities for concentrated study in analytical, inorganic, organic or physical chemistry, or chemical physics. A plan of study is worked out for each student to ensure a sound basis for research. In keeping with the university’s commitment as an urban institution, the department also offers part-time programs leading to these degrees.

Refer to the department’s website for more information: www.has.vcu.edu/che.

Administration
Scott Gronert
Professor and Department Chair

Sally S. Hunicutt
Associate Professor and Assistant Department Chair

www.has.vcu.edu/che

Chemistry courses
Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

A minimum grade of C is required in each prerequisite course: CHEM 100 (if required through placement qualifiers), CHEM 101, CHEM 102, CHEM 301, CHEM 302 and CHEM 309.

In chemistry laboratories each student is charged for breakage incurred. Approved safety glasses are required. Failure to check out of laboratory, upon withdrawal or for other reasons, will incur a charge, billed from the Student Accounting Department.

Follow these links to chemistry (CHEM) courses or the (CHEZ) laboratories.

Chemistry, Bachelor of Science (B.S.)
The curriculum in chemistry prepares students for graduate study in chemistry and related fields and for admission to schools of medicine, dentistry, pharmacy and veterinary medicine. It prepares students to teach in secondary schools or to work in chemical and industrial laboratories and in related fields of business and industry. The department also offers required and elective courses in chemistry to students in other programs of study.

The Department of Chemistry offers five areas of concentration for completing the Bachelor of Science in Chemistry: chemical science, professional chemist, professional chemist with honors, biochemistry and chemical modeling. With proper selection of electives, the degree satisfies admission requirements to most schools of medicine, dentistry, pharmacy and veterinary medicine.

Degree requirements – Bachelor of Science in Chemistry
Chemical science concentration
Professional chemist concentration
Professional chemist with honors concentration
Biochemistry concentration
Chemical modeling concentration
Advising notice
Transfer students

Degree requirements – Bachelor of Science in Chemistry
The required courses and their recommended sequences are given for each of the main degree concentrations (chemical science, professional chemist, professional chemist with honors, biochemistry and chemical modeling).

A grade of C or higher is required in each prerequisite course: CHEM 100 (if required through placement qualifiers), CHEM 101, CHEM 102, CHEM 301 and CHEM 302.

Chemical science concentration
(37 credits in chemistry and 16 to 18 credits of collateral requirements)

The chemical science concentration is tailored for the pre-professional study of the health sciences and other interdisciplinary areas where an emphasis on chemistry is sought. This concentration for the bachelor’s degree in chemistry permits students to select more courses from other disciplines. With fewer requirements in mathematics, physics and chemistry, this concentration is one option for students planning to study medicine or dentistry.

Freshman year
CHEM 101 and CHEZ 101 General Chemistry and Laboratory I *
CHEM 102 and CHEZ102 General Chemistry and Laboratory II
MATH 200 Calculus with Analytic Geometry**
MATH 201 Calculus with Analytic Geometry

Sophomore year
CHEM 301 and CHEZ 301 Organic Chemistry and Laboratory I
CHEM 302 and CHEZ 302 Organic Chemistry and Laboratory II
CHEM 309 and CHEZ 309 Quantitative Analysis and Laboratory
PHYS 207 University Physics I or 201 General Physics
PHYS 208 University Physics II or 202 General Physics

Junior year
CHEM 303 and CHEZ 303 Physical Chemistry and Laboratory I
CHEM 304 Physical Chemistry
CHEM 320 Inorganic Chemistry I
CHEM 398 Professional Practices and Perspectives Seminar
Junior/senior year
Approved chemistry electives (three credits minimum) selected from the following courses or any CHEM 500-level class for which prerequisites have been met:
CHEM 304 Physical Chemistry Laboratory II
CHEM/EGRC 306 Industrial Applications of Inorganic Chemistry
CHEM/MEDC 310 Medicinal Chemistry and Drug Design
CHEM 401 Applications of Instrumental Techniques in Organic and Forensic Chemistry
CHEM 403 Biochemistry I or CHEM 404 Biochemistry II
CHEM 406 and CHEZ 406 Inorganic Chemistry II and Laboratory
CHEM 409 and CHEZ 409 Instrumental Analysis and Laboratory
CHEM 492 Independent Study
CHEM 493 Chemistry Internship
CHEM 510 Atomic and Molecular Structure
* Students’ readiness for CHEM 101 is determined by a satisfactory combination of math SAT score and high school GPA, including high school chemistry. CHEM 100 is offered for students who need further preparation and does not count toward the 37 credits needed for the chemistry degree.
** In preparation for MATH 200, all students must take the Mathematics Placement Test. Depending on the results, a student may be placed in the MATH 151 Precalculus Mathematics prior to enrolling in MATH 200.
*** Both of these courses are required to satisfy the requirements for the American Chemical Society certification of the professional chemist concentration. MATH 307 also is required for the American Chemical Society certification. Chemistry majors in the professional chemist concentration must meet their statistics general education requirements by taking the required chemistry classes.

Professional chemist with honors concentration
(49 credits and 21 credits of collateral requirements)
The professional chemist concentration requires a greater number of chemistry courses, and is designed for students whose future studies or career plans involve chemistry as a central theme. With the proper combination of courses, this degree can be certified as meeting the requirements of the American Chemical Society.

Freshman year
CHEM 101 and CHEZ 101 General Chemistry and Laboratory I*
CHEM 102 and CHEZ 102 General Chemistry and Laboratory II
MATH 200 Calculus with Analytic Geometry**
MATH 201 Calculus with Analytic Geometry

Sophomore year
CHEM 301 and CHEZ 301 Organic Chemistry and Laboratory I
CHEM 302 and CHEZ 302 Organic Chemistry and Laboratory II
CHEM 309 and CHEZ 309 Quantitative Analysis and Laboratory
MATH 307 Multivariate Calculus***
PHYS 207 University Physics I
PHYS 208 University Physics II

Junior year
CHEM 303 and CHEZ 303 Physical Chemistry and Laboratory I
CHEM 304 and CHEZ 304 Physical Chemistry and Laboratory II
CHEM 320 Inorganic Chemistry I
CHEM 398 Professional Practices and Perspectives Seminar

Senior year
CHEM 492 Independent Study (minimum of four credits)
CHEM 498 Honors Thesis (minimum of one credit)
Approved elective (three credits minimum) selected from the following list:
CHEM/EGRC 306 Industrial Applications of Inorganic Chemistry
CHEM/MEDC 310 Medicinal Chemistry and Drug Design
CHEM 401 Applications of Instrumental Techniques in Organic and Forensic Chemistry
CHEM 403 Biochemistry I
CHEM 404 Biochemistry II

Junior/senior year
Approved chemistry electives; 13 credits minimum including at least two credits of laboratory selected from the following courses or any CHEM 500-level class for which prerequisites have been met:
CHEM/EGRC 306 Industrial Applications of Inorganic Chemistry
CHEM/MEDC 310 Medicinal Chemistry and Drug Design
CHEM 401 Applications of Instrumental Techniques in Organic and Forensic Chemistry
CHEM 403 Biochemistry I
CHEM 404 Biochemistry II
CHEM 406 and CHEZ 406 Inorganic Chemistry II and Laboratory***
CHEM 409 and CHEZ 409 Instrumental Analysis and Laboratory***
CHEM 492 Independent Study
CHEM 493 Chemistry Internship
CHEM 510 Atomic and Molecular Structure
* Students’ readiness for CHEM 101 is determined by a satisfactory combination of math SAT score and high school GPA, including high school chemistry. CHEM 100 is offered for students who need further preparation and does not count toward the 49 credits needed for the chemistry degree.
** In preparation for MATH 200, all students must take the Mathematics Placement Test. Depending on the results, a student may be placed in the MATH 151 Precalculus Mathematics prior to enrolling in MATH 200.
*** Both of these courses are required to satisfy the requirements for the American Chemical Society certification of the professional chemist concentration. MATH 307 also is required for the American Chemical Society certification. Chemistry majors in the professional chemist concentration meet their statistics general education requirements by taking the required chemistry classes.
Biochemistry concentration
(43 credits in chemistry and related courses and 27 to 29 credits of collateral requirements)

The biochemistry concentration focuses on the biological aspects of chemistry, including molecular genetics and molecular biotechnology. This degree is another option for students planning to study medicine or dentistry.

Freshman year
BIOI 151 and BIOZ 151 Introduction to Biological Science and Laboratory I
BIOI 152 and BIOZ 152 Introduction to Biological Science and Laboratory II
CHEM 101 and CHEZ 101 General Chemistry and Laboratory I*
CHEM 102 and CHEZ 102 General Chemistry and Laboratory II
MATH 200 Calculus with Analytic Geometry**
MATH 201 Calculus with Analytic Geometry

Sophomore year
BIOI 218 Cell Biology or BIOI/FRSC 314 Introduction to Molecular Biology
CHEM 301 and CHEZ 301 Organic Chemistry and Laboratory I
CHEM 302 and CHEZ 302 Organic Chemistry and Laboratory II
CHEM 309 and CHEZ 309 Quantitative Analysis and Laboratory
PHYS 207 University Physics I or 201 General Physics
PHYS 208 University Physics II or 202 General Physics

Junior/senior year
CHEM 403 Biochemistry I
CHEM 404 Biochemistry II
Approved elective (three credits minimum) selected from:
BIOL 310 Genetics (note: prerequisite is BIOL 218)
CHEM/MEDC 310 Medicinal Chemistry and Drug Design
CHEM 406 Inorganic Chemistry II
CHEM 409 and CHEZ 409 Instrumental Analysis and Laboratory
CHEM 492 Independent Study

* Students’ readiness for CHEM 101 is determined by a satisfactory combination of math SAT score and high school GPA, including high school chemistry. CHEM 100 is offered for students who need further preparation and does not count toward the 44 credits needed for the chemistry degree.

** In preparation for MATH 200, all students must take the Mathematics Placement Test. Depending on the results, a student may be placed in the MATH 151 Precalculus Mathematics prior to enrolling in MATH 200. STAT 210 or 212 is required to meet the general education requirement in statistics.

Chemical modeling concentration
(44 credits in chemistry in related major courses and 27 credits of collateral requirements)

The chemical modeling concentration emphasizes areas of overlap between chemistry and the mathematical sciences and computer science. Students in this concentration will focus on learning the chemistry and computer technology for modeling the structure, properties and reactivity of molecules.

Freshman year
CHEM 101 and CHEZ 101 General Chemistry and Laboratory I*
CHEM 102 and CHEZ 102 General Chemistry and Laboratory II
MATH 200 Calculus with Analytic Geometry**
MATH 201 Calculus with Analytic Geometry

Sophomore year
CHEM 301 and CHEZ 301 Organic Chemistry and Laboratory I
CHEM 302 and CHEZ 302 Organic Chemistry and Laboratory II
CHEM 309 and CHEZ 309 Quantitative Analysis and Laboratory
MATH 307 Multivariate Calculus
MATH 310 Linear Algebra or MATH 302 Numerical Calculus
PHYS 207 University Physics I
PHYS 208 University Physics II

Senior year
CHEM 492 Independent Study (computational chemistry project)
CHEM 404 Biochemistry II
CHEM/MEDC 310 Medicinal Chemistry and Drug Design
CHEM 406 Inorganic Chemistry II
CHEM 409 and CHEZ 409 Instrumental Analysis and Laboratory
CHEM 492 Independent Study

* Students’ readiness for CHEM 101 is determined by a satisfactory combination of math SAT score and high school GPA, including high school chemistry. CHEM 100 is offered for students who need further preparation and does not count toward the 44 credits needed for the chemistry degree.

** In preparation for MATH 200, all students must take the Mathematics Placement Test. Depending on the results, a student may be placed in the MATH 151 Precalculus Mathematics prior to enrolling in MATH 200. STAT 210 or 212 is required to meet the general education requirement in statistics.

Advising notice
The Department of Chemistry places advising holds on the student accounts of all declared chemistry majors. These students must meet with their academic advisers before registering for courses in order to have the hold removed.

Transfer students
Transfer students intending to major in chemistry must satisfy all chemistry major course requirements and complete a minimum of nine credits of VCU chemistry courses at the 300-, 400- or 500-level of which no more than three credits may be CHEM 492 or CHEM 493. This restriction applies to all chemistry degree concentrations.

Chemistry, minor in
The minor in chemistry requires the following courses: CHEM 101-102 and CHEZ 101 and 102 General Chemistry and General Chemistry Laboratory I and II; CHEM 301-302 and CHEZ 301 and 302 Organic Chemistry and Organic Chemistry Laboratory I and II; and one additional three-credit upper-level (300-400) chemistry course. A minimum of nine upper-level chemistry credits must be taken at VCU. Consult course descriptions for prerequisites in mathematics and physics.

Department of English

The purpose of the Department of English is to teach students to see their worlds with clarity and respond to them with sensitivity, through reading and writing. Students are invited to read and explore a diversity of texts created in different times and voices and then to respond to these texts variously and critically, situating them within their contexts and discerning their important aesthetic features, rhetorical elements and social functions.

Students in this department also are encouraged to express themselves in expository or imaginative works that engage thought and feeling, evince purpose clearly, marshal appropriate evidence and observe principles of rhetorical decorum.

The Department of English offers a Bachelor of Arts in English, as well as minors in American studies (in conjunction with the Department of History), British studies, English (for non-English majors), writing and creative writing, the Master of Arts in English and the Master of Fine Arts in Creative Writing, and a doctoral program leading to a Ph.D. in Media, Art, and Text. Use the program search navigation to view individual program descriptions and curricula, or visit the department’s website at www.has.vcu.edu/eng for additional information.

Administration
English courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to English (ENGL) courses.

American studies, minor in

Richard A. Fine
Professor and Coordinator, American Studies

Offered jointly by the departments of English and History, the minor in American studies consists of at least 18 upper-level credits to be distributed as follows: six credits in American studies (AMST) courses; three credits in humanities electives; three credits in social science electives; and six credits in either humanities, social science or other approved electives, or in independent study. All courses selected to fulfill distribution areas must deal with American materials and topics. A list of recommended courses and electives is available from the coordinator.

British studies, minor in

David Latané
Professor and Coordinator, British Studies

Offered jointly by the departments of English and History, the minor in British studies requires at least 18 credits, 15 of which must be taken at the 300 level or above. Courses must come from at least two different departments. One three-credit course must come from each of the following core lists. The remaining nine credits may be selected from the core lists or the approved electives.

Core 1: Modern Britain
ENGL 341 British Literature and Culture After 1945
ENGL 391 Topics in Literature or ENGL 491 Topics in Writing (when topic is appropriate)
HIST 320 History of England
HUMS 391 Special Topics in the Humanities and Sciences (when topic is appropriate)

Core 2: British origins
ENGL 401 Shakespeare
ENGL 402 Chaucer
ENGL 403 Milton
ENGL 412 18th-century Studies: ______
HIST 319 History of England

Core 3: Britain’s impact on the world
ENGL 365/AFAM 365/INTL 367 Caribbean Literature
ENGL 371 American Literary Beginnings
HIST 342 Colonial America, 1585-1763
HIST 343 Two American Revolutions, 1763-1800
HIST/AFAM 389 History of Southern Africa
HIST/AFAM 392 The Caribbean to 1838

Approved electives
ARTH 425 Neoclassicism, Romanticism, Realism and Impressionism through Fin-de-Siecle
ARTH 429 Studies in 19th-century Art (appropriate topic)

Creative writing, minor in

The minor in creative writing consists of 18 credits in upper-level courses. At least 15 credits must be in upper-level courses drawn from this list. Note that some of these courses may be taken twice for credit.

ENGL 303 Writing for Stage and/or Screen
ENGL 305 Writing Poetry
ENGL 307 Writing Fiction
ENGL 309 Writing Creative Nonfiction
ENGL 433/THEA 426 Advanced Playwriting
ENGL 445 Form and Theory of Poetry
ENGL 447 Form and Theory of Fiction
ENGL 435 Advanced Poetry Writing
ENGL 437 Advanced Fiction Writing
ENGL 439 Literary Nonfiction Writing
ENGL 491 Topics in Writing

Three credits may be taken from these other writing and writing-related courses:
ENGL/CRJS 302 Legal Writing
ENGL 304 Advanced Writing
ENGL 310/MGMT 327 Business and Technical Report Writing
ENGL 388 Writing in the Workplace
ENGL 493 English Internship

English, Bachelor of Arts (B.A.)

The Department of English offers the Bachelor of Arts in English, which provides a broad liberal arts base for advanced study and for careers in academic and professional areas.

The department also offers required and elective courses in English composition, language, literature and film for English majors and for students in other programs.

Degree requirements – Bachelor of Arts in English

The Bachelor of Arts in English requires a minimum of 120 credits, with at least 33 upper-level (numbered 300 to 499) credits in the major. Six of the 33 credits may be taken in upper-level foreign literature read in the original language or upper-level foreign literature in English translation (FLET). UNIV 111 and 112 (or equivalent) and a 200-level literature course (or equivalent) do not count toward the major.

Distribution

English majors must take a minimum of nine credits at the 400 level, including 499. Students may expect 300-level courses in the department to emphasize historical breadth, while 400-level courses will offer in-depth focus. ENGL 410-414, 480-485 and 499 will include British, American or other literatures (world, transatlantic, etc.). For specific topics, see the Schedule of Classes; majors
are encouraged to choose 400-level courses from more than one literary tradition (British, American, other literatures).

English majors should distribute their 33 credits of English course work as follows:

1. **ENGL 301 Introduction to the English Major (3 credits)**
   This course will introduce students to ways in which language is used in literary texts and to the practice of writing responses to those texts. Texts will represent at least two different literary genres (drama, poetry, prose). It should be taken at the beginning of the student’s major, preferably before completing more than six hours of other upper-level English courses. Students must achieve a minimum grade of C in order to complete this requirement.

2. **Linguistics, writing and criticism (6 credits)**
   Courses in this category will help students develop their skills in linguistic analysis, written expression and literary and cultural analysis. Students must select courses from two of these three areas:
   - **Linguistics**
     - ENGL/LING/ANTH 390 Introduction to Linguistics
     - ENGL/LING 450 Modern Grammar
     - ENGL/LING 451 History of the English Language
     - ENGL/LING/WMNS 452 Language and Gender
     - ENGL/LING 453 Modern Rhetoric
     - ENGL 454/INTL 454/ANTH 450 Cross-cultural Communication
     - ENGL 455/LING 455/PRLG 448/ANTH 448 Language Culture and Cognition
   - **Writing**
     - ENGL/CRJS 302 Legal Writing
     - ENGL 304 Advanced Writing
     - ENGL 305 Writing Poetry
     - ENGL 310/MGMT 327 Business and Technical Report Writing
     - ENGL 367 Writing Process and Practice
     - ENGL 388 Writing in the Workplace
     - ENGL/EDU 389 Teaching Writing Skills
     - ENGL 433/THEA 426 Advanced Dramatic Writing
     - ENGL 435 Advanced Poetry Writing
     - ENGL 437 Advanced Fiction Writing
     - ENGL 439 Advanced Creative Nonfiction Writing
     - ENGL 491 Topics in Writing (by specific topic)
   - **Criticism**
     - ENGL 311 Introduction to Literary Theory
     - ENGL/WMNS 352 Feminist Literary Theory
     - ENGL 391 Topics in Literature (by specific topic)
     - ENGL 445 Form and Theory of Poetry
     - ENGL 447 Form and Theory of Fiction
     - ENGL 449 Form and Theory of Creative Nonfiction
     - ENGL 485 Literary Theory and Criticism:

3. **Literature (15 credits)**
   Courses in this category will enable students to study literature within its historical and cultural contexts. To ensure that students select a range of courses, they must include six credits in literature prior to 1700, six credits in literature between 1700 and 1945 and three credits in the literature of diversity. No single course may be used to satisfy two of these requirements.

   Literature prior to 1700
   - ENGL 320 Early Literary Traditions
   - ENGL 321 English Drama From 900 to 1642
   - ENGL 322 Medieval Literature: Old English to Middle English
   - ENGL 324 Late Medieval Literature
   - ENGL 325 Early Modern Literature
   - ENGL 326 Shakespeare in Context
   - ENGL/RELS 361 The Bible as Literature
   - ENGL 391 Topics in Literature (by specific topic)
   - ENGL 401 Shakespeare
   - ENGL 402 Chaucer
   - ENGL 403 Milton

   Literature between 1700 and 1945
   - ENGL 330 Restoration and 18th-century Drama
   - ENGL 331 Restoration and 18th-century British Literature
   - ENGL 332 18th-century British Novels and Narratives
   - ENGL 335 British Literature of the Romantic Era
   - ENGL 336 19th-century British Novels and Narratives
   - ENGL 337 Victorian Poetry
   - ENGL 340 Early 20th-century British Literature
   - ENGL 371 American Literary Beginnings
   - ENGL 372 U.S. Literature: 1820-1865
   - ENGL 373 U.S. Literature: 1865-1913
   - ENGL 374 U.S. Literature: Modernism
   - ENGL 377 19th-century U.S. Novels and Narratives
   - ENGL 391 Topics in Literature (by specific topic)
   - ENGL 412 18th-century Studies:
   - ENGL 413 19th-century Studies:
   - ENGL 480 Authors:
   - ENGL 481 Genres:
   - ENGL 482 Literary Topics:
   - ENGL 483 Literary Texts and Contexts:
   - ENGL 484 Literary Movements:

   Literature of diversity
   - ENGL/WMNS 353 Women Writers
   - ENGL/WMNS 354 Lesbian Text/Queer Theories
   - ENGL 363/AFAM 363/INTL 366 African Literature
   - ENGL/ANTH 364 Mythology and Folklore
   - ENGL 365/AFAM 365/INTL 367 Caribbean Literature
   - ENGL 366 Writing and Social Change:
   - ENGL/AFAM 379 African-American Literature
   - ENGL 381 Multiethnic Literature
   - ENGL 391 Topics in Literature (by specific topic)
   - ENGL 480 Authors:
   - ENGL 481 Genres:
   - ENGL 482 Literary Topics:
   - ENGL 483 Literary Texts and Contexts:
   - ENGL 484 Literary Movements:

4. **Required electives/optimal focus (6 to 9 credits)**
   As part of the English major, electives allow students to take courses of particular interest to them. Electives may not be used to satisfy any other requirements for the major, except ENGL 499. In consultation with an adviser, students are encouraged to cluster their elective courses in one of the following focus areas.
   - Literary studies (including courses grouped by historical period, genre, region, national and minority traditions, thesaurus, literary movement, literary influence, etc.)
   - Writing (including both expository and creative writing)
   - Criticism and theory (including approaches to literature, form and theory courses, etc.)
   - Cultural studies (including courses that focus on race, class, gender, ethnicity, film, popular culture, etc.)
   - Linguistics (including courses that focus on history of the language, cross-cultural communications, etc.)

   Students are advised to consult the full listing and description of English courses before planning their elective courses.

5. **ENGL 499 Senior Seminar in English**
   This course will ensure that majors will have undertaken at least one piece of
sustained, researched writing. Senior seminars are intended for students nearing the completion of their studies and should be regarded as the capstone course of the major. Because of the nature of this course, senior seminars usually will not be offered during the summer. Students should plan their program with this factor in mind. When appropriate, this seminar may be used to fulfill another requirement of the major. For specific topics, see the Schedule of Classes.

Collateral requirements

In addition to the ENGL courses required for the Bachelor of Arts degree, students must complete the study of a foreign language through the intermediate level (202 or 205) by course or placement.

English, minor in

The minor in English consists of 18 credits in upper-level (300-400) English courses. ENGL 301 Introduction to the English Major is recommended, but not necessary for completion of the minor. Students must select their courses with at least three credits in each of the following areas: literature before 1700; literature between 1700 and 1945; linguistics, advanced writing or criticism; and the literature of diversity. Three credits may be taken in foreign literature in English translation and three credits in ENGL 492 Independent Study.

English majors may not minor in English.

Writing, minor in

The minor in writing consists of 18 credit hours in upper-level writing courses, including ENGL 304 Advanced Writing, which should be taken as early in the minor as possible. The other 15 credit hours should be chosen from the following areas:

1) Creative writing:
   ENGL 303 Writing for Stage and/or Screen
   ENGL 305 Writing Poetry
   ENGL 307 Writing Fiction
   ENGL 309 Writing Creative Nonfiction
   ENGL 433/THEA 426 Advanced Dramatic Writing
   ENGL 435 Advanced Poetry Writing
   ENGL 437 Advanced Fiction Writing
   ENGL 439 Advanced Creative Nonfiction Writing
   ENGL 491 Topics in Writing

2) Professional writing and rhetoric:
   ENGL/CRJS 302 Legal Writing
   ENGL 310/MGMT 327 Business and Technical Report Writing
   ENGL 388 Writing in the Workplace
   ENGL/LING 453 Modern Rhetoric
   ENGL 491 Topics in Writing
   ENGL 493 English Internship
   MASC 203 Journalism Writing
   MASC 301 Graphics for Journalism
   MASC 305 Copy Editing
   MASC 341 Feature and Article Writing

Since special permission is required for some of these courses, it is important that the student contact the director of undergraduate studies early for advising. No upper-level mass communications courses may be taken until a student has completed MASC 203.

Department of Forensic Science

The Department of Forensic Science offers programs leading to bachelor’s and master’s degrees.

The Bachelor of Science is for students who plan a career or graduate study in the forensic sciences. This specialization features a prescribed curriculum with academic emphasis in biology, chemistry and criminal justice. The B.S. in Forensic Science provides students with a solid education preparing them for effective professional careers in forensic laboratories, public and private, basic research laboratories, clinical laboratories, and/or to pursue graduate studies. Students also will be prepared to pursue advanced degrees in the physical sciences, biological sciences, forensic science, law, allied health and medicine, to name a few.

The Master of Science in Forensic Science prepares students for careers as forensic scientists in government and private laboratories. Students receive in-depth exposure to specializations within the field, including drug analysis, DNA analysis, trace evidence, criminalistics and legal issues.

For more information visit www.has.vcu.edu/forensics.

Administration

Michelle R. Peace
Instructor and Interim Department Chair
Tracey Dawson Cruz
Associate Professor and Graduate Program Director
Sarah J. Seashols
Instructor and Undergraduate Program Director

www.has.vcu.edu/forensics

Forensic science courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow these links to forensic science (FRSC) courses or the (FRSZ) laboratories.

Forensic Science, Bachelor of Science (B.S.)

The major in forensic science leads to a Bachelor of Science degree and is for students who plan a career or graduate study in the forensic sciences. This specialization features a prescribed curriculum with academic emphasis in biology, chemistry and criminal justice.

The forensic science program provides students with fundamental learning in forensic laboratory analyses and crime scene investigation. The program offers two concentrations: forensic chemistry and forensic biology. Students will select one of the two concentrations prior to the second semester of their sophomore year. The forensic chemistry concentration requires an additional 30 credits in chemistry, calculus, criminal justice, forensic science and elective credits beyond the core requirements; the forensic biology concentration requires an additional 33 credits in biology, criminal justice, forensic science and elective credits beyond the core requirements.

Department requirements
Forensic chemistry concentration requirements
Forensic biology concentration requirements

Department requirements

The forensic science program requires a minimum of 120 credits including completion of the College of Humanities and Sciences general education requirements, 49-51 forensic science core program credits and 30 (forensic chemistry) or 33 (forensic biology) concentration-specific credits. In addition, students in the forensic science program must receive a minimum grade of C in specified courses in order to be able to continue in the program.

Collateral requirements: The following requirements must be fulfilled by all majors:

- 4 credits in mathematics (MATH 200 required)*
- 3 credits in senior capstone (FRSC 490 required)
- 3 credits in literature and civilization (PHIL 201 required)

*Depending on the results of the Mathematics Placement Test, students may be placed in a lower-level mathematics course first.

The forensic science core program courses are distributed as follows:

- 4 credits in biology (BIOL and BIZO 152)
- 18 credits in chemistry (CHEM and CHEZ 101 and 102, CHEM and CHEZ 301 and 302)
- 14-16 credits in other related courses (CRJS 181, PHYS 201-202 or PHYS 207 and 208, STAT 210)
- 13 credits in forensic science (FRSC 300, FRSC 309, FRSC 365, FRSC 375)
Forensic chemistry concentration requirements
This concentration is offered for those students who are interested in graduate study or careers in toxicology and the chemistry or other related sections of forensic laboratories. Students also will be prepared for work in private analytical laboratories.

Students completing the forensic chemistry concentration will be eligible for a minor in chemistry. See the Bulletin for requirements for the minor in chemistry.

In addition to the core courses, students in this concentration will be required to complete CHEM 303 and CHEZ 303 Physical Chemistry and Laboratory I, CHEM 309 and CHEZ 309 Quantitative Analysis and Laboratory, FRSC 400 and FRSZ 400 Forensic Chemistry and Laboratory, CHEM 409 and CHEZ 409L Instrumental Analysis and Laboratory, MATH 201 Calculus II, and a minimum of seven additional credit hours of advanced study (200- to 500-level) in an area of specialization. It is recommended that these credits be FRSC, CRJS, BIOL, PHYS, MATH or CHEM courses. See adviser for suggestions. If CHEM 304 Physical Chemistry, CHEM 320 Inorganic Chemistry I and CHEM 398 Professional Practices and Perspectives Seminar are taken as part of the seven additional credit hours, students also will be eligible for a Bachelor of Science in Chemistry with a chemical science concentration.

The required courses and their recommended sequence are listed below. Students must receive a minimum grade of C in those courses marked with an asterisk (*) as well as in all forensic science courses (FRSC and FRSZ) in order to continue in the program. Students also must receive a minimum grade of C in CHEM 101 to enroll in CHEM 102 and receive a minimum grade of C in CHEM 301 to enroll in CHEM 302.

Freshman year
Biol 152 Introduction to Biological Science II
BIOZ 152 Introduction to Biological Science Laboratory II
CHEM 101-102 General Chemistry*
CHEZ 101 and 102 General Chemistry Laboratory I* and II*
CRJS 181 Justice System Survey
MATH 200-201 Calculus with Analytical Geometry
UNIV 111 and 112 Focused Inquiry I and II

General education requirements

Sophomore year
CHEM 301 Organic Chemistry*
CHEM 302 Organic Chemistry
CHEZ 301 and 302 Organic Chemistry Laboratory I and II
PHYS 201 General Physics* or PHYS 207 University Physics I*
PHYS 202 General Physics or PHYS 208 University Physics II
STAT 210 Basic Practice of Statistics
UNIV 200 Writing and Rhetoric

General education requirements

Junior year
CHEM and CHEZ 303 Physical Chemistry and Laboratory I
CHEM and CHEZ 309 Quantitative Analysis and Laboratory
FRSC 300 Survey of Forensic Science
FRSC 309 Scientific Crime Scene Investigation
FRSC 365 Forensic Microscopy
FRSC 375 Forensic Evidence, Law and Criminal Procedures

General education requirements

Senior year
CHEM and CHEZ 409 Instrumental Analysis and Laboratory
FRSC 400 and FRSZ 400 Forensic Chemistry and Laboratory
FRSC 490 Professional Practices in Forensic Science
Advanced course work in area of specialization

General education requirements

Forensic biology concentration requirements
The forensic biology concentration is well-suited for students interested in graduate study or careers in the forensic biology section of forensic laboratories. Students also will be prepared for work in molecular biology laboratories in both the public and private sectors.

Students completing the forensic biology concentration will be eligible for a minor in chemistry. See the Bulletin for requirements for the minor in chemistry.

In addition to the core courses, students in this concentration will be required to complete BIOL and BIOZ 151 Introduction to Biological Science and Laboratory I, BIOL 218 Cell Biology, BIOL 310 Genetics, CHEM 403 Biochemistry I, BIOZ 476 Biology Capstone Laboratory, FRSC 385 Forensic Serology, FRSC/BIOZ 438 Forensic Molecular Biology and Laboratory, and a 300-, 400-, or 500-level forensic science or natural science elective. Additionally, a minimum of seven additional credit hours of advanced study (200- to 500-level) in an area of specialization must be taken. It is recommended that these credits be CRJS, BIOL, PHYS, MATH or CHEM courses. See your adviser for suggestions. The student completing the forensic biology concentration who also completes BIOL 317 will be eligible for a minor in biology.

The required courses and their recommended sequence are listed below. Students must receive a minimum grade of C in those courses marked with an asterisk (*) as well as in all forensic science courses (FRSC and FRSZ) in order to continue in the program. Students also must receive a minimum grade of C in CHEM 101 to enroll in CHEM 102 and receive a minimum grade of C in CHEM 301 to enroll in CHEM 302.

Freshman year
CHEM 101-102 General Chemistry*
CHEZ 101-102 General Chemistry Laboratory I* and II*
CRJS 181 Justice System Survey
MATH 200 Calculus with Analytical Geometry
STAT 210 Basic Practice of Statistics
UNIV 111 and 112 Focused Inquiry I and II

General education requirements

Sophomore year
Biol 151 and BIOZ 151 Introduction to Biological Science I* and Laboratory I*
Biol 152 and BIOZ 152 Introduction to Biological Science II* and Laboratory II*
PHYS 201 General Physics* or PHYS 207 University Physics I*
PHYS 202 General Physics or PHYS 208 University Physics II
UNIV 200 Writing and Rhetoric
Advanced course work in area of specialization

General education requirements

Junior year
Biol 218 Cell Biology
Biol 310 Genetics
BIOZ 476 Biology Capstone Laboratory
CHEM 301 Organic Chemistry*
CHEM 302 Organic Chemistry
CHEZ 301 and 302 Organic Chemistry Laboratory I and II
FRSC 300 Survey of Forensic Science
FRSC 309 Scientific Crime Scene Investigation
FRSC 365 Forensic Microscopy
FRSC 375 Forensic Evidence, Law and Criminal Procedures

General education requirements

Senior year
CHEM 403 Biochemistry I
FRSC 385 Forensic Serology
FRSC/BIOZ 438 Forensic Molecular Biology Laboratory
FRSZ/BIOZ 438 Forensic Molecular Biology Laboratory
FRSC 490 Professional Practices in Forensic Science
FRSC 300-, 400-, or 500-level or natural science elective
Advanced course work in area of specialization

General education requirements

Department of Gender, Sexuality and Women's Studies
Janet R. Hutchinson
Professor and Department Chair
www.has.vcu.edu/wst

Gender, sexuality and women’s studies provides a broad interpretation and view of diversity, including the interdisciplinary, cross-cultural examination of women’s perspectives and experiences, masculinity and femininity, and heterosexuality and alternate sexualities as culturally constructed and socially experienced.

Women’s studies courses
Descriptions for all courses offered by the university may be accessed through the online courses database at [www.pubapps.vcu.edu/vcucourses](http://www.pubapps.vcu.edu/vcucourses). You may search by unit, subject or keyword, as well as by degree level.

Follow this link to women’s studies (WMNS) courses.

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**Gender, Sexuality and Women’s Studies, Bachelor of Arts (B.A.)**

A Bachelor of Arts in Gender, Sexuality and Women’s Studies requires a total of 120 credits with 30 credits in WMNS courses and at least 15 of these credits in upper-level courses. Students may choose a general interdisciplinary program or a health and science concentration.

All students must complete the general education requirements for the Bachelor of Arts in the College of Humanities and Sciences. All students also must complete core course requirements of WMNS 201 Introduction to Women’s Studies and WMNS 401 Topical Senior Seminar.

The general interdisciplinary program requires that students take either WMNS 301 Feminist Social Theory or WMNS/ENGL 352 Feminist Literary Theory, plus one three-credit course from each of the four perspective area lists below.

Students in the health and science concentration must take WMNS 301 Feminist Social Theory and WMNS 393 Feminist Research and Methods, in addition to three credits from the diversity/international perspectives on gender, sexuality and women area and nine credits from the health and science area. STAT 210 is recommended in this concentration, and an additional three credits (for a total of 6 credits) in a natural science are required.

The remaining 30 credits in the major are electives, but must be WMNS courses or courses cross-listed with WMNS. These electives may include WMNS 391 Special Topics and WMNS 402 Independent Study. Note, however, that an independent study is permitted only after the student has an agreement with a supervising faculty member and permission from the major’s adviser.

**General interdisciplinary program**

**Health and science concentration**

Perspective areas
- Diversity/international perspectives on gender, sexuality and women
- Humanities perspectives on gender sexuality and women
- Social science perspectives on women gender sexuality and women
- Health and science

**General interdisciplinary program**

Required courses and recommended sequence

**Freshman year**

- BIOL and BIOZ 101 Biological Concepts and Laboratory
- MATH 131 Introduction to Contemporary Mathematics
- UNIV 111 and 112 Focused Inquiry I and II
- WMNS 201 Introduction to Women’s Studies
- Natural science (100- to 200-level chemistry or physics)

General education requirements

**Sophomore year**

- STAT 208 Statistical Thinking
- UNIV 200 Writing and Rhetoric
- WMNS 301 Feminist Social Theory or WMNS 352 Feminist Literary Theory
- WMNS 200- to 400-level diversity/international perspective course
- WMNS 200- to 400-level humanities perspectives on women course
- WMNS 200- to 400-level social science perspectives on women course

General education requirements

**Junior year**

- WMNS 300- to 400-level women, health and science course
- WMNS 200- to 400-level elective
- WMNS 300- to 400-level elective

General education requirements

**Senior year**

- WMNS 401 Senior Seminar
- WMNS 300- to 400-level elective

General education requirements

**Electives**

Students may take general elective credits to reach the 120-credit total.

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**Health and science concentration**

Required courses and recommended sequence

**Freshman year**

- BIOL and BIOZ 101 Biological Concepts and Laboratory
- MATH 131 Introduction to Contemporary Mathematics
- UNIV 111 and 112 Focused Inquiry I and II
- WMNS 201 Introduction to Women’s Studies
- Natural science (100- to 200-level chemistry or physics)

General education requirements

**Sophomore year**

- STAT 210 Basic Practice of Statistics
- UNIV 200 Writing and Rhetoric
- WMNS 301 Feminist Social Theory
- WMNS 200- to 400-level diversity/international perspective course
- WMNS 300- to 400-level women, health and science courses (six credits)
- Natural science (100-level or higher biology, chemistry or physics)

General education requirements

**Junior year**

- WMNS 393 Feminist Research Methods
- WMNS 300- to 400-level women, health and science course

General education requirements

**Senior year**

- WMNS 401 Topical Senior Seminar
- WMNS 200- to 400-level electives (six credits)

General education requirements

**Electives**

Students may take general elective credits to reach the 120-credit total.

**Perspective areas**

Note: A course listed in two different areas may not be used to fulfill both area requirements for the major.

**Diversity/international perspectives on gender, sexuality and women**

- FLET 391/INTL 391/WMNS 391 Topics in Foreign Literature in English Translation (when the topic is women Francophone writers)
- WMNS 206/SOCY 206/AFAM 206 African American Family Relationships
- WMNS 305/SOCY 305/AFAM 305 African American Family in Social Context
- WMNS 318/POLI 318/AFAM 318 Politics of Race, Class and Gender
- WMNS 339, 340/HIST 339, 340 History of Women in Europe
- WMNS 353/ENGL 353 Women Writers (when international writers)
- WMNS 354/ENGL 354 Lesbian Texts/Queer Theories
- WMNS 366/POLI 366/INTL 368 Women and Global Politics
- WMNS 371/ RELS 371 Islam and Women (prerequisite: RELS 317/INTL 317 Islam)
- WMNS 372/REL 372/INTL 372 Global Women’s Spirituality
- WMNS 380 Lesbian and Bisexual Women
- WMNS 390/HIST 390/AFAM 390 Africa and the Americas: Slavery, Gender and Race

**Humanities perspectives on women on gender, sexuality and women**

- ENGL 410/WMNS 391 Medieval Studies: __________ (when the topic is women)
- ENGL 411/WMNS 391 Early Modern Studies: __________ (when the topic is women)
- ENGL 412/WMNS 391 18th-century Studies (when the topic is women)
- ENGL 491/WMNS 391 Topics in Writing (when the topic is women)
- FLET 491/WMNS 391 Topics in Foreign Literature in English Translation (when the topic is women Francophone writers)
- PHIL 391/WMNS 391 Topics in Philosophy (when the topic is women and science)
- WMNS 236/ENGL 236 Women in Literature
- WMNS 339, 340/HIST 339, 340 History of Women in Europe
- WMNS 341/HIST 341 American Women’s History
- WMNS 352/ENGL 352 Feminist Literary Theory
- WMNS 353/ENGL 353 Women Writers (course may be repeated once with a different topic)
- WMNS 354/ENGL 354 Lesbian Texts/Queer Theories
- WMNS 371/ RELS 371 Islam and Women (prerequisite: RELS 317/INTL 317 Islam)
- WMNS 372/REL 372/INTL 372 Global Women’s Spirituality
At least six credits from each of three areas:

1. (HIST) courses
2. WMNS courses or courses cross-listed with WMNS courses.
3. History, bachelor of arts (B.A.)

Social science perspectives on women on gender, sexuality and women

POLI 391/WMNS 391 Topics in Political Science (when the topic is gender politics in popular culture)

POLI 391/WMNS 391 Topics in Political Science (when the topic is contemporary issues in feminist theory)

POLI 391/WMNS 391 Topics in Political Science (when the topic is women and health care policy)

POLI 391/WMNS 391 Topics in Political Science (when the topic is reproductive technologies, ethics and policies)

WMNS 206/SOCY 206/AFAM 206 African American Family Relationships

WMNS 301 Feminist Social Theory

WMNS 304/SOCY 304/ANTH 304 The Family

WMNS 305/SOCY 305/AFAM 305 African American Family in Social Context

WMNS 316/POLI 316 Women and the Law

WMNS 318/POLI 318/AFAM 318 Politics of Race, Class and Gender

WMNS 319/POLI 319 Women and American Politics

WMNS 333/SOCY 333 Sociology of Sex and Gender

WMNS 334/SOCY 334 Sociology of Women

WMNS 335/PSYC 335 Psychology of Women

WMNS 336/SOCY 336 Violence Against Women

WMNS 336/POLI 336 INTL 368 Women and Global Politics

WMNS 380 Lesbian and Bisexual Women

WMNS 382/CRJS 382 Women in the Justice System

WMNS 491/AFAM 491 Topics in Women’s Studies (when the topic is anthropological and international perspectives on women and health)

Health and science

ENVS 391/WMNS 391 Topics in Environmental Studies (when the topic is women, nature and the environment)

FLET 391/WMNS 391 Topics in Foreign Literature in Translation (when the topic is women and madness in Francophone literature)

MSC 391/WMNS 391 Topics in Mass Communications (when the topic is women and technology)

PHIL 391/WMNS 391 Topics in Philosophy (when the topic is women and science)

POLI 391/WMNS 391 Topics in Political Science (when the topic is women and health care policy)

POLI 391/WMNS 391 Topics in Political Science (when the topic is reproductive technologies, ethics and policies)

WMNS 333/SOCY 333 Sociology of Sex and Gender

WMNS 335/PSYC 335 Psychology of Women

WMNS 336/SOCY 336 Violence Against Women

WMNS 392 Women’s Health Issues Across the Life Span

WMNS 393 Feminist Research and Methods

WMNS 491/AFAM 491 Topics in Women’s Studies (when the topic is anthropological and international perspectives on women and health)

Gender, sexuality and women’s studies, minor in

The minor in gender, sexuality and women’s studies consists of 18 credits in WMNS courses or courses cross-listed with WMNS courses. Students are required to take the following: (1) WMNS 201 Introduction to Women’s Studies, (2) a feminist theory course and (3) a course addressing diversity/international perspectives on gender, sexuality and women. The remainder of courses may be chosen from electives.

Department of History

The Department of History offers programs at the graduate and undergraduate levels, specializing in a multidimensional analysis of the human past. Faculty research interests vary among thematic, topical, national or chronological emphases. For more information regarding the department and its specialty areas, visit the Web at www.has.vcu.edu/has.

Administration
b) United States
c) Africa, Asia, Latin America or the Middle East

Collateral requirements
In addition to the history courses required for the Bachelor of Arts degree, students must complete the study of a foreign language through the intermediate level (202 or 205) by course or placement.
Along with completion of general education requirements of the College of Humanities and Sciences for the Bachelor of Arts degree and undergraduate requirements, students may choose approved electives from any courses offered by the College of Humanities and Sciences and the schools of the Arts, Business and Education.

Students should consult with their advisers each semester to design a program that meets these requirements and suits their interests and career objectives.

Honors in history
To earn a Bachelor of Arts degree with honors in history students must have a minimum cumulative GPA of 3.0 or a 3.0 average for their junior year, with at least a 3.3 GPA in history courses. Students also must have completed an honors paper in history. See the department adviser or chair for information about the paper requirements. Official certification of the award will be presented to students upon their graduation.

History, minor in

The minor in history consists of 18 credits in history, 12 of which must be at the upper level (300-400). At least one three-credit course must be taken in three of the following regions: Africa, North America, Asia, Europe, Latin America, Middle East.

Department of Mathematics and Applied Mathematics

The Department of Mathematics and Applied Mathematics offers an undergraduate program leading to a Bachelor of Science in Mathematical Sciences with concentrations in applied mathematics, biomathematics, mathematics and secondary mathematics teacher preparation. The department administers the Master of Science in Mathematical Sciences concentrations in applied mathematics or mathematics and is involved in administering the Doctor of Philosophy in Systems Modeling and Analysis. The curricula of these programs are run jointly with additional concentrations offered by the Department of Statistical Sciences and Operations Research.

Administration

Andrew M. Lewis
Associate Professor and Department Chair
www.math.vcu.edu

Mathematics and applied mathematics courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcuocourses. You may search by unit, subject or keyword, as well as by degree level.

Students registering for CMSC 201 or 255, MATH 131, 141, 151, 200, 211 or 300, or STAT 208 or 210 must place into these courses either from receiving VCU credit for stated prerequisite courses (for instance, MATH 151 is a stated prerequisite course for MATH 200) or from a satisfactory score (within a 30-month period immediately preceding the beginning of the course) on the VCU Mathematics Placement Test.

Follow this link to mathematics and applied mathematics (MATH) courses.
Use this link to see systems modeling and analysis (SYSM) courses.

Mathematical Sciences, Bachelor of Science (B.S.)

The curriculum in mathematical sciences promotes understanding of the mathematical sciences and their structures, uses and relationships to other disciplines. This to end, the scholarly growth of the faculty and students in the mathematical sciences is nurtured through study, research and a high standard of teaching. The curriculum provides a sound foundation for the student seeking to enter a career with a technological orientation or for the student who wishes to pursue graduate study in applied mathematics, biomathematics, mathematics, operations research, statistics, teaching mathematics in secondary schools or related fields.

A Bachelor of Science is offered jointly by the Department of Mathematics and Applied Mathematics and the Department of Statistical Sciences and Operations Research. In the Department of Mathematics and Applied Mathematics, students pursuing the Bachelor of Science in Mathematical Sciences can choose from one of the four following concentrations:

Mathematical sciences/applied mathematics – concentrates on the analytical and computational techniques necessary to solve many of today’s problems. These methods traditionally had been applied in such areas as chemistry and physics, but now are applied in many other areas.

Mathematical sciences/biomathematics – focuses on the overlap between mathematics and the disciplines of biology and medicine. This concentration covers the mathematical methods of modeling and analysis of phenomena in the life sciences.

Mathematical sciences/mathematics – fosters the understanding of the power and the beauty of pure mathematics and its applications to various branches of knowledge.


As an alternative to the above concentrations, students may design an individual plan of study with the help of their advisers.

In the Department of Statistical Sciences and Operations Research, students pursuing the Bachelor of Science in Mathematical Sciences can choose from two areas of concentration.

Mathematical sciences/operations research – focuses on modern mathematical techniques for solving problems arising from other fields, such as engineering, business or economics.

Mathematical sciences/statistics – teaches students how mathematical models used in the investigation of uncertain phenomena are developed and applied to experimental and nonexperimental data.

Degree requirements – Bachelor of Science in Mathematical Sciences
Concentrations
Double major
Second baccalaureate degree

Degree requirements – Bachelor of Science in Mathematical Sciences

The B.S. in Mathematical Sciences requires a minimum of 120 credits with at least 41 of those credits in courses labeled MATH, STAT, OPER or CMSC. Along with the general education requirements of the College of Humanities and Sciences and the undergraduate degree requirements, students are required to take core courses and fulfill specific requirements for the degree.

Based on the results of the Mathematics Placement Test, students may be required to take MATH 151 Precalculus Mathematics. No more than one course in mathematics (MATH) at the 100 level can count for the general requirements toward the bachelor’s degree. Credit for 100-level mathematical sciences courses cannot be applied toward the mathematical sciences courses required for the major in mathematical sciences.

Mathematical sciences majors must complete the following requirements:
A. Complete one of the following sequences:
1. BIOL 151 and 152 and BIOZ 151 and 152 Introduction to Biological Science and Laboratory I and II
2. CHEM 101-102 and CHEZ 101 and 102 General Chemistry and Laboratory I and II
3. PHYS 207 and 208 University Physics I and II or PHYS 201-202 General Physics
B. Complete another course in the natural sciences that is not from the general education science and technology list. This course must be in a science different from the sequence chosen in A above.
Mathematics core. All students in the mathematical concentrations are required to take the following courses:
Note: A grade of C or better is required in courses/credits marked with an asterisk (*).
MATH 200-201 Calculus with Analytic Geometry*
MATH 255 Introduction to Computational Mathematics or CMSC 245 Introduction to Using Programming C++
MATH 300 Introduction to Mathematical Reasoning*
MATH 307 Multivariate Calculus*
MATH 310 Linear Algebra*
MATH 490 Mathematical Expositions
MATH 507 Analysis I
STAT 212 Concepts of Statistics

Statistics core. All students in the statistical sciences or operations research concentrations must take the following courses:
MATH 200-201 Calculus with Analytic Geometry
MATH 307 Multivariate Calculus
MATH 310 Linear Algebra
STAT 212 Concepts of Statistics

Concentrations
By completing the listed requirements, students may obtain a designation on their transcripts that their study has emphasized one of the following concentrations. Students may choose to meet the requirements of more than one concentration.

B.S. in Mathematical Sciences/applied mathematics concentration
Note: A grade of C or better is required in courses/credits marked with an asterisk (*).
MATH 301 Differential Equations*
MATH 352 Ordinary Differential Equations I
MATH 353 Partial Differential Equations I
Either MATH 501 Introduction to Abstract Algebra or MATH 525 Introduction to Combinatorial Mathematics
Nine additional upper-level credits in mathematics, statistics, operations research or computer science courses, at least one of which must be at the 500 level, or three credits at the 500 level and complete a minor or a double major.

B.S. in Mathematical Sciences/biomathematics concentration
Note: A grade of C or better is required in courses/credits marked with an asterisk (*).
MATH 301 Differential Equations*
MATH/BNFO/BIOL 380 Introduction to Mathematical Biology
MATH 352 Ordinary Differential Equations I
MATH 353 Partial Differential Equations I
MATH 382 Computational Modeling in Mathematical Biology
MATH 585 Biomathematics Seminar: ___ (2 credits)
Three additional upper-level credits in mathematics, statistics, operations research or computer science courses or complete a minor or a double major.

B.S. in Mathematical Sciences/mathematics concentration
Note: A grade of C or better is required in courses/credits marked with an asterisk (*).
MATH 301 Differential Equations*
MATH 501 Introduction to Abstract Algebra
MATH 508 Analysis II
MATH 509 General Topology I
MATH 510 General Topology II
MATH 511 Applied Linear Algebra
MATH 512 Complex Analysis for Applications
MATH 515 Numerical Analysis I
MATH 517 Methods of Applied Mathematics
MATH 518 Methods of Applied Mathematics
MATH/OPER 520 Game Theory and Linear Programming
MATH 525 Introduction to Combinatorial Mathematics
MATH 532 Ordinary Differential Equations I
MATH 533 Partial Differential Equations I
MATH 534 Applied Discrete Dynamical Systems
OPER 591 Topics in Operations Research†
STAT 314 Applications of Statistics‡
STAT 321 Introduction to Statistical Computing
STAT 391 Topics in Statistics‡
STAT 404 Introduction to Statistical Inference
STAT 421 Computational Issues in Statistical Science
STAT 422 Structured Problem Solving using Statistics
STAT 435 Industrial Statistics
STAT 445 Analyses of Dependent Data
STAT/BIOS 513 Mathematical Statistics I
STAT/BIOS 514 Mathematical Statistics II
STAT/BIOS 523 Nonparametric Statistical Methods
STAT 541 Applied Statistics for Engineers and Scientists‡
STAT/BIOS 544 Statistical Methods II
STAT 546 Linear Models
STAT 591 Topics in Statistics‡

† Special topics courses require prior approval from the department chair or the student’s adviser.
‡ Students may not choose both STAT 314 and STAT 541.

B.S. in Mathematical Sciences/statistics concentration
Note: A minimum grade of C is required in courses/credits marked with an asterisk (*).
CMSC 245 Introduction to Programming Using C++ and CMSC 246 Advanced Programming Using C++ or CMSC 255 Introduction to Programming and CMSC 256 Data Structures and Object Oriented Programming
MATH 300 Introduction to Mathematical Reasoning*
MATH 501 Introduction to Abstract Algebra* or MATH 507 Bridge to Modern Analysis* or MATH 509 General Topology I*
OPER/MATH 327 Mathematical Modeling*
OPER 427 Deterministic Operations Research*
OPER 428 Stochastic Operations Research*
OPER/STAT 490 Developing Professional Skills in Operations Research and Statistics*
STAT/MATH 309 Introduction to Probability Theory*

B.S. in Mathematical Sciences/operations research concentration
Note: A minimum grade of C is required in courses/credits marked with an asterisk (*).
STAT 314 Applications of Statistics*  
STAT 404 Introduction to Statistical Inference*  
STAT 435 Industrial Statistics*  
STAT 445 Analyses of Dependent Data*  
STAT 503 Introduction to Stochastic Processes*  
STAT/BIOS 544 Statistical Methods II*  

Two additional courses chosen from the following list:  
INFO 364 Database Systems  
MATH 301 Differential Equations  
MATH 305 Elementary Number Theory  
MATH 391 Topics in Mathematics†  
MATH 407 Advanced Calculus  
MATH 501 Introduction to Abstract Algebra  
MATH 507 Bridge to Modern Analysis  
MATH 508 Analysis II  
MATH 509 General Topology I  
MATH 510 General Topology II  
MATH 511 Applied Linear Algebra  
MATH 512 Complex Analysis for Applications  
MATH 515 Numerical Analysis I  
MATH/OPER 520 Game Theory and Linear Programming  
MATH 525 Introduction to Combinatorial Mathematics  
MATH 532 Ordinary Differential Equations I  
MATH 533 Partial Differential Equations I  
MATH 534 Applied Discrete Dynamical Systems  
OPER/MATH 327 Mathematical Modeling  
OPER 427 Deterministic Operations Research  
OPER 428 Stochastic Operations Research  
OPER 591 Topics in Operations Research†  
STAT 321 Introduction to Statistical Computing  
STAT 391 Topics in Statistics†  
STAT 421 Computational Issues in Statistical Science  
STAT 422 Structured Problem-solving Using Statistics  
STAT/BIOS 513 Mathematical Statistics I  
STAT/BIOS 514 Mathematical Statistics II  
STAT/BIOS 523 Nonparametric Statistical Methods  
STAT 546 Linear Models  
STAT 591 Topics in Statistics†  

† Special topics courses require prior approval from the department chair or the student’s adviser.

With the approval of the departmental Undergraduate Credentials Committee and the adviser, students can design their own plan of study, which also will result in a Bachelor of Science in Mathematical Sciences. This student-planned curriculum must contain at least 24 credits in upper-level (300- to 500-) mathematical sciences courses.

Double major

Students who meet the requirements for two of the concentrations within the mathematical sciences curriculum can receive a double major. To initiate a double major, students must obtain the appropriate form from the Office of Records and Registration.

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Second baccalaureate degree

For students possessing a bachelor’s degree and wishing to gain undergraduate preparation in an area of mathematical sciences, second baccalaureate degrees are offered through the department. For detailed information about these programs, refer to the “Academic regulations and general degree requirement” section of this bulletin.

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Mathematical sciences, minor in

A minor in mathematical sciences consists of at least 18 credits offered by the Department of Mathematics and Applied Mathematics and the Department of Statistical Sciences and Operations Research, including a minimum of three credits of calculus and nine upper-level credits. Neither STAT 208, STAT 210, STAT 312 nor any 100-level course may be used to fulfill the required 18 credits. A minimum GPA of 2.0 must be achieved in the minor. Students in the mathematical sciences majors cannot minor in mathematical sciences.

Department of Military Science and Leadership

www.has.vcu.edu/mil

The military science curriculum teaches the principles of management and leadership as a foundation for civilian and military careers. Graduates of this program are eligible for appointments as commissioned officers in the U.S. Army, the U.S. Army Reserve or Army National Guard.

For more information on participating in ROTC or on scholarship opportunities, contact the Recruiting Operations Officer, Capt. John Scott; call (804) 287-6612 or visit military.richmond.edu.

Scholarships

Army ROTC offers students several opportunities for scholarships worth more than $29,000 at VCU. High school students and students on campus may apply for a four-year scholarship. Two-year scholarships also are available to on-campus students. All scholarships cover VCU tuition, most books, laboratory fees and provide between $300 to $500 a month during the school year for living expenses.

The four-year program

The traditional four-year program is divided into two parts.

Basic course

Normally freshman and sophomore years, which cover military history, traditions, organizations and national defense. The emphasis in the course is on leadership development and general life skills. There is no commitment to the U.S. Army, unless the student is on a ROTC scholarship.

Advanced course

Departmental approval is required to enter junior- and senior-level classes. They cover instruction and practice in management, tactics, ethics, professionalism and continued leadership development.

All ROTC uniforms and materials are furnished at no cost. Students selected for advanced classes receive $450 or $500 a month during the school year.

During the summer between the junior and senior years, students will attend a four-week course, Leadership Development and Assessment Camp. LDAC provides hands-on experience and evaluations for students at Fort Lewis, Wash.

The two-year program

Students who have not taken any of the basic classes are still eligible for a commission through the two-year program.

In this program, student attend the Leader’s Training Course at Fort Knox, Ky., for four weeks during the summer. Upon completion of LTC, students are eligible for the advanced courses in their junior and senior years.

Simultaneous Membership Program

This program allows students to become members of the Army National Guard or the Army Reserve while enrolled in Army ROTC.

Advanced ROTC SMP students are paid for their guard/reserve training plus they receive a monthly ROTC allowance of $400, $450 or $500 for up to three years.

ROTC for veterans

If students are veterans, military experience can fulfill the basic course requirements. Some veterans may enroll directly into advanced courses. In addition to any financial assistance received from ROTC, veterans still are qualified to receive any and all VEAP/GI Bill/Army College Fund benefits to which they are entitled.

Military science and leadership courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to military science and leadership (MILS) courses.
**Department of Philosophy**

**Anthony Ellis**
Professor and Department Chair

[www.has.vcu.edu/phi/philos/phi_home.htm](http://www.has.vcu.edu/phi/philos/phi_home.htm)

Philosophy aims at a deeper understanding of matters that should most concern the human race. Philosophical questions crop up in science, religion, art, morality, politics, medicine and in everyday life. Students enrolled in philosophy are encouraged to think seriously about fundamental issues in all these domains and to formulate coherent and well-grounded points of view. Because of its extensive use of critical and analytical reasoning, philosophy equips students for careers in medicine, law, business and other fields that require careful thought and the clear expression of ideas.

The Department of Philosophy offers a Bachelor of Arts in Philosophy. The department offers courses for students in other programs, as well as for those majoring in philosophy or religious studies.

**Philosophy courses**

Descriptions for all courses offered by the university may be accessed through the online courses database at [www.pubapps.vcu.edu/vcucourses](http://www.pubapps.vcu.edu/vcucourses). You may search by unit, subject or keyword, as well as by degree level.

Follow this link to [philosophy (PHIL) courses](http://www.pubapps.vcu.edu/vcucourses).

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**Philosophy, Bachelor of Arts (B.A.)**

The Bachelor of Arts in Philosophy requires a minimum of 120 credits, with at least 30 of those credits in philosophy. Fifteen of these credits must be selected from upper-level philosophy courses.

Majors in philosophy must fulfill the requirements of either the regular concentration or the ethics and public policy concentration. Majors intending to pursue graduate studies in philosophy are advised to choose the regular concentration. Students whose main interests in philosophy are ethics, political philosophy, philosophy of law or public policy (and who may wish to pursue graduate work in law, political science, economics and related areas) will probably want to choose the ethics and public policy concentration.

**Required courses regular concentration**

1. PHIL 103 Ancient Greek and Medieval Western Philosophy and PHIL 104 Modern Western Philosophy
2. One of PHIL 201/211/212/213/214 (introductory ethics courses)
3. PHIL 222 Logic
4. Three of the following with at least one course from each of group (a) and group (b):
   a) PHIL 320 Philosophy of Law, PHIL 327 Ethical Theory or PHIL 335 Social and Political Philosophy
   b) PHIL 301 Mind and Reality, PHIL 302 Reason and Knowledge or PHIL 303 Philosophy of Language
   c) PHIL 391 Topics in Philosophy
5. PHIL 490 Seminar in Philosophy (as a capstone course)

**Required courses ethics and public policy concentration**

1. One of PHIL 101 Introduction to Philosophy, PHIL 103 Ancient Greek and Medieval Western Philosophy or PHIL 104 Modern Western Philosophy
2. One of PHIL 201/211/212/213/214 (introductory ethics courses)
3. PHIL 222 Logic
4. One of PHIL 301 Mind and Reality, PHIL 302 Reason and Knowledge or PHIL 303 Philosophy of Language
5. Two of PHIL 320 Philosophy of Law, PHIL 327 Ethical Theory, PHIL 335 Social and Political Philosophy
6. PHIL 490 Seminar in Philosophy (as a capstone course)

7. Two of the following courses, which for this concentration will be accepted within the required 30 credits of the program: MRBL 350 Tort Law, CRJS 324 Courts and the Judicial Process, CRJS 355 Criminalological Theory, ECON 301 Microeconomic Theory, ECON 302 Macroeconomic Theory, HIST 333/ECON 419 History of Economic Thought, HIST 338 History of Socialism, HIST 369, 370 American Constitutional and Legal Development, POLI 310 Public Policy, POLI 314 U.S. Constitutional Law, POLI 315 Courts and Politics, SOCY 302 Contemporary Social Problems, SOCY 430 Politics, Power and Ideology

Students also must fulfill the general education requirements of the College of Humanities and Sciences for the Bachelor of Arts degree and undergraduate requirements.

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**Philosophy, minor in**

A philosophy minor consists of 18 credits, with at least nine of those credits in upper-level (300-400) courses and either PHIL 103 Ancient Greek and Medieval Philosophy or PHIL 104 Modern Western Philosophy.

**Philosophy of law, minor in**

A minor in philosophy of law consists of 18 credits, to include PHIL 320 Philosophy of Law, PHIL 327 Ethical Theory, PHIL 335 Social and Political Philosophy, and one course from the following PHIL 211 History of Ethics, PHIL 212 Ethics and Applications and PHIL 213 Ethics and Health Care. Philosophy of law minors also must take two of the following courses: HIST 369, 370 American Constitutional and Legal Development, POLI 314 U.S. Constitutional Law and POLI 341, 342 History of Political Thought.

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**Department of Physics**

The Department of Physics offers programs leading to the Bachelor of Science in Physics and the Master of Science in Physics and Applied Physics. The department also offers an accelerated B.S.-M.S. program that allows students in the baccalaureate program to take graduate courses that will count toward the M.S. in Physics degree.

**Administration**

Robert Gowdy
Associate Professor and Interim Department Chair

[www.has.vcu.edu/phy](http://www.has.vcu.edu/phy)

**Physics courses**

Descriptions for all courses offered by the university may be accessed through the online courses database at [www.pubapps.vcu.edu/vcucourses](http://www.pubapps.vcu.edu/vcucourses). You may search by unit, subject or keyword, as well as by degree level.

Follow these links to [physics (PHYS) courses](http://www.pubapps.vcu.edu/vcucourses) or the [PHYZ laboratories](http://www.has.vcu.edu/phy).

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**Physics, Bachelor of Science (B.S.)**

The curriculum in physics prepares students for technical careers in physics or an allied area, for careers in engineering and for the teaching of physics in secondary schools. The curriculum also prepares students for graduate studies in physics or a related area.

**Degree requirements – Bachelor of Science in Physics**

Curriculum outline 

Double major in engineering and physics

**Degree requirements – Bachelor of Science in Physics**

The Bachelor of Science in Physics requires a minimum of 120 credits, including 54 credits in physics and physics-related courses, as detailed in the course lists.

CHEM 101-102 and CHEZ 101 and 102 General Chemistry and Laboratories I and II are highly recommended for all physics majors.

Along with the general education requirements of the College of Humanities and Sciences and the undergraduate requirements, students must take required courses and fulfill specific requirements for the degree as follows:

**Required physics courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 207 University Physics I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 208 University Physics II</td>
<td>5</td>
</tr>
</tbody>
</table>
**Accelerated Bachelor of Science (B.S.) in Physics and Master of Science (M.S.) in Physics and Applied Physics**

Students who are enrolled in the Bachelor of Science in Physics program may elect to take graduate courses that will count toward the Master of Science in Physics and Applied Physics degree. Up to six hours of graduate credit may be earned in this way without any special provision. In order to offer more than six hours of pre-admission graduate credit toward the graduate degree, a student must apply to the physics department Graduate Admission Committee for admission to the Accelerated B.S.-M.S. program. Persons applying for admission to this program (1) should submit a curricular plan for completing the bachelor’s degree within two years or its part-time equivalent; (2) should indicate which graduate courses they intend to offer toward the physics master’s degree; (3) should have a B average or better.

The M.S. Degree Completion Form should be accompanied by a memo from the Department of Physics Graduate Admission Committee to indicate which graduate courses were taken under the Accelerated B.S.-M.S. Program. Persons applying for admission to this program should also take one or more credits in PHYS 397 or 492.

**Double major in engineering and physics**

A detailed description of this program can be found in the “School of Engineering” section of this bulletin.

# Required mathematics courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 200 Calculus with Analytic Geometry</td>
<td>4</td>
</tr>
<tr>
<td>MATH 201 Calculus with Analytic Geometry</td>
<td>4</td>
</tr>
<tr>
<td>MATH 301 Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 307 Multivariate Calculus</td>
<td>4</td>
</tr>
</tbody>
</table>

Total required mathematics courses: 15 credits

# Elective physics and physics-related courses

A total of nine credits must be taken from the list of elective physics and physics-related courses provided below. Those students who have their primary major in physics are required to fulfill at least three of these credits using upper-level physics courses.

Any upper-level physics course not listed as a required course, e.g.: PHYS 302 Classical Mechanics II

**Senior year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 340 Statistical Mechanics and Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 450 Senior Physics Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 490 Seminar in Conceptual Physics</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

Total senior year: 30 credits

**Junior year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 301 Classical Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 376 Electromagnetism</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 380 Quantum Physics I</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

Total junior year: 30 credits

**Sophomore year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 301 Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 307 Multivariate Calculus</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 208 University Physics II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 320 Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYSY 320 Modern Physics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric Workshop</td>
<td>3</td>
</tr>
<tr>
<td>General education requirements</td>
<td>11</td>
</tr>
</tbody>
</table>

Total sophomore year: 30 credits

**Freshman year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 301 Classical Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 320 Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 340 Statistical Mechanics and Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 376 Electromagnetism</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 380 Quantum Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 450 Senior Physics Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 490 Seminar in Conceptual Physics</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

Total freshman year: 30 credits

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### Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 409 Instrumental Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 510 Atomic and Molecular Structure</td>
<td>4</td>
</tr>
<tr>
<td>MATH 310 Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 511 Applied Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 512 Complex Analysis for Applications</td>
<td>3</td>
</tr>
<tr>
<td>MATH 515 and 516 Numerical Analysis I and II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 517-518 Methods of Applied Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 533 Partial Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 541 Applied Statistics for Engineers and Scientists</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 101 and CHEZ 101 General Chemistry and Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 102 and CHEZ 102 General Chemistry and Laboratory II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 200 Calculus with Analytic Geometry</td>
<td>4</td>
</tr>
<tr>
<td>MATH 201 Calculus with Analytic Geometry</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 207 University Physics I</td>
<td>5</td>
</tr>
<tr>
<td>UNIV 111 and 112 Focused Inquiry I and II</td>
<td>6</td>
</tr>
<tr>
<td>General education requirements</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>15</td>
</tr>
</tbody>
</table>

Total: 30 credits

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### Electives

**Physics/mathematics electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 380 Quantum Physics I</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

Total physics/mathematics electives: 9 credits

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### Double major in engineering and physics

A detailed description of this program can be found in the “School of Engineering” section of this bulletin.
In addition to the PSYC courses required for the B.S. in Psychology, the student must complete PSYC 451 History of Psychology and at least one course from each of the following four content areas:

**Standard curriculum**
- PSYC 301 Child Psychology or PSYC 304 Life Span Developmental Psychology (cannot take both for degree credit)
- PSYC 302 Psychology of Adolescence
- PSYC 306 Psychology of Adult Development
- PSYC/LFSC 307 Community Solutions: Multiple Perspectives
- GRTY 410 Introduction to Gerontology

**Developmental**
- PSYC 301 Child Psychology or PSYC 304 Life Span Developmental Psychology (cannot take both for degree credit)
- PSYC 302 Psychology of Adolescence
- PSYC 306 Psychology of Adult Development
- PSYC/LFSC 307 Community Solutions: Multiple Perspectives
- GRTY 410 Introduction to Gerontology

**Social/personality**
- PSYC 309 Personality
- PSYC 321 Social Psychology
- PSYC/AFAM 322 Personality and Behavior of the African American
- PSYC 323 Interpersonal Relations
- PSYC/RELS 333 Psychology and Religious Experience
- PSYC/WMNS 335 Psychology of Women
- PSYC/SOCY 341 Group Dynamics

**Physiological/learning**
- PSYC 401 Physiological Psychology
- PSYC 406 Perception
- PSYC 410 Principles of Learning and Cognition

**Self-development/applied psychology**
- PSYC 303 Personal Adjustment
- PSYC 308 Stress and its Management
- PSYC 310 Industrial Psychology
- PSYC 318 Principles of Psychological Tests and Measurements
- PSYC 340 Introduction to the Helping Relationship
- PSYC 407 Psychology of the Abnormal
- PSYC 412 Health Psychology
- PSYC 426 Child Psychopathology

**Concentrations in psychology**
In addition to the core and instead of the standard curriculum, after successful completion of PSYC 101 and PSYC 214 with a minimum of a C grade in each, a student may apply in writing to the department's director of undergraduate studies to pursue one of the following specialized concentrations in psychology. The pre-graduate school concentration provides a broad training in the core areas of scientific psychology intended to prepare students for the GRE and successful application to graduate school. The other concentrations represent curricula focused on special strengths of the Department of Psychology, and may prepare the student for psychological work not requiring the Ph.D. (cannot take both for degree credit)

**Pre-graduate school concentration**
An overall GPA of 3.25 and a psychology GPA of 3.25 are required to successfully complete this concentration, which consists of 34 credits.
- PSYC 304 Life Span Developmental Psychology
- PSYC 318 Principles of Psychological Tests and Measurements
- PSYC 321 Social Psychology
- PSYC 401 Physiological Psychology
- PSYC 407 Psychology of the Abnormal
- PSYC 410 Principles of Learning and Cognition
- PSYC 451 History of Psychology
- PSYC 492, 493 or 494 (three credits)

**Life science concentration**
An overall GPA of 2.50 and a psychology GPA of 2.50 and concentration courses are required to successfully complete this concentration. Note: If you follow this concentration and even at the time of graduation you meet the 2.50 GPA requirements, you may not be able to graduate under the standard curriculum because you may not have taken PSYC 451 or courses in the developmental and social/personality content areas. This concentration consists of 34 credits.
- BIOL 201 Human Biology (satisfies biology corequirement)
- BIOL 445 Neurobiology and Behavior
- PHTX 400 Drugs and Their Actions
- PSYC 401 Physiological Psychology
- PSYC 406 Perception
- PSYC 410 Principles of Learning and Cognition
PSYC 412 Health Psychology
PSYC 492, 493 or 494 (three credits)

Applied psychology concentration
An overall GPA of 2.50 and a psychology GPA of 2.50 and concentration courses are required to successfully complete this concentration. Note: If you follow this concentration and even at the time of graduation meet the 2.50 GPA requirements, you may not be able to graduate under the standard curriculum because you may not have taken PSYC 451 or courses in the physiological/learning content areas. This concentration consists of 31 credits.

PSYC 304 Life Span Developmental Psychology
PSYC 308 Stress and its Management
PSYC 309 Personality
PSYC 318 Principles of Psychological Tests and Measurements
PSYC 340 Introduction to the Helping Relationship
PSYC 407 Psychology of the Abnormal
PSYC 492, 493 or 494 (three credits)

Urban psychology concentration
An overall GPA of 2.50 and a psychology GPA of 2.50 and concentration courses are required to successfully complete this concentration. Note: If you follow this concentration and even at the time of graduation meet the 2.50 GPA requirements, you may not be able to graduate under the standard curriculum because you may not have taken PSYC 451 or courses in the physiological/learning content areas. This concentration consists of 34 credits.

POLI 321 City Politics
PSYC 302 Psychology of Adolescence
PSYC 304 Life Span Developmental Psychology
PSYC/AFAM 322 Personality and Behavior of the African American
PSYC 340 Introduction to the Helping Relationship
PSYC 493 or 494 (three credits)

URSP 116 Introduction to the City

Psychology advising (Psyugrad)
Students choose to major in psychology for many reasons. Most often they select the major from a combination of wanting to help other people and wanting to learn the scientific principles of behavior. Students in the program expect to receive career counseling and information on graduate and/or professional school training. The department has developed methods to meet these expectations.

Psyugrad has been established by the department to provide advising to undergraduate majors with educational and career planning. Students are shown how to choose appropriate electives for bachelor's-level careers in mental health services, personnel, management, corrections, rehabilitation, health services, education and laboratory research. In addition, all psychology majors are enrolled in PSYUGRAD, a Blackboard organization. PSYUGRAD provides up-to-date information on research opportunities, jobs, special presentations and advising documents.

In many cases, a service-learning course will meet the urban experience general education requirement (refer to the Schedule of Classes).

Honors in psychology
Psychology majors in the baccalaureate program can earn honors in psychology. Any student is eligible to join the program if he or she declares a major in psychology, meets one of the three following entrance requirements and joins the Honors College.

Entering freshmen must have combined SAT scores of at least 1910 and rank in the top 15 percent of their high school graduating class and present an unweighted 3.5 GPA (4.0 scale). Students transferring to VCU must have a 3.5 cumulative GPA in at least 30 college semester hours of credit and have no more than 60 college semester hours of credit. Continuing VCU students must have a 3.5 cumulative GPA and have taken a minimum of 20, but no more than 60, credits at VCU.

Once admitted to the program, the honors student must fulfill three basic program requirements.

First, students must take a minimum of nine credits in psychology courses that are designated as honors sections. Three content courses, which will vary by semester, comprise these nine credits. PSYC 497, 498 and 499 may not be used to fulfill this requirement.

Next, honors students must enroll for a minimum of three credits in PSYC 494 Research Internship in Psychology, no later than the fall semester of their junior year.

Finally, all students must complete PSYC 497 Honors Seminar in the spring semester of their junior year and complete PSYC 498-499 Honors in Psychology in their senior year. Students complete an honors thesis during this three-semester sequence in which they propose, conduct and defend their research.

A student in the program will graduate with honors in psychology if he or she has completed all course requirements with a B or better, has maintained a GPA of 3.5, overall and in psychology, and has completed all other requirements for the Bachelor of Science in Psychology.

Psychology minor in
A minor in psychology consists of 18 credits in psychology, including PSYC 101 Introduction to Psychology, one course from each of the four basic areas: developmental, social/personality, physiological/learning and self-development/applied psychology; and one additional course. PSYC 201 Career Development in Psychology cannot be used to meet this requirement. At least nine of the 18 credits must be taken at VCU.

Department of Statistical Sciences and Operations Research
The Department of Statistical Sciences and Operations Research offers programs leading to a Bachelor of Science in Mathematical Sciences, a Master of Science in Mathematical Sciences with a concentration in either operations research or statistics and a Doctor of Philosophy in Systems Modeling and Analysis. The curriculum of both programs is run jointly with the Department of Mathematics and Applied Mathematics.

The department also offers a post-baccalaureate undergraduate certificate in statistics.

Administration
D’Arey P. Mays
Associate Professor and Department Chair

www.stat.vcu.edu
Statistical sciences and operations research courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to statistical sciences (STAT) courses.

Use this link to see operations research (OPER) courses.

Use this link to see systems modeling and analysis (SYSM) courses.

The curriculum in mathematical sciences promotes understanding of the mathematical sciences and their structures, uses and relationships to other disciplines. To this end, the scholarly growth of the faculty and students in the mathematical sciences is nurtured through study, research and a high standard of teaching. The curriculum provides a sound foundation for the student seeking to enter a career with a technological orientation or for the student who wishes to pursue graduate study in applied mathematics, biomathematics, mathematics, operations research, statistics, teaching mathematics in secondary schools or related fields.

A Bachelor of Science is offered jointly by the Department of Mathematics and Applied Mathematics and the Department of Statistical Sciences and Operations Research. In the Department of Mathematics and Applied Mathematics, students pursuing the Bachelor of Science in Mathematical Sciences can choose from one of the four following concentrations:

**Mathematical sciences/applied mathematics** – concentrates on the analytical and computational techniques necessary to solve many of today’s problems. These methods traditionally had been applied in such areas as chemistry and physics, but now are applied in many other areas.

**Mathematical sciences/biomathematics** – focuses on the overlap between mathematics and the disciplines of biology and medicine. This concentration covers the mathematical methods of modeling and analysis of phenomena in the life sciences.

**Mathematical sciences/mathematics** – fosters the understanding of the power and the beauty of pure mathematics and its applications to various branches of knowledge.

**Mathematical sciences/secondary teacher preparation** – prepares students for teaching mathematics in the secondary schools.

As an alternative to the above concentrations, students may design an individual plan of study with the help of their advisers.

In the Department of Statistical Sciences and Operations Research, students pursuing the Bachelor of Science in Mathematical Sciences can choose from two areas of concentration.

**Mathematical sciences/operations research** – focuses on modern mathematical techniques for solving problems arising from other fields, such as engineering, business or economics.

**Mathematical sciences/statistics** – teaches students how mathematical models used in the investigation of uncertain phenomena are developed and applied to experimental and nonexperimental data.

**Degree requirements – Bachelor of Science in Mathematical Sciences**

<table>
<thead>
<tr>
<th>Concentrations</th>
<th>Double major</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second baccalaureate degree</td>
<td></td>
</tr>
</tbody>
</table>

Based on the results of the Mathematics Placement Test, students may be required to take MATH 151 Precalculus Mathematics. No more than one course in mathematics (MATH) at the 100 level can count for the general requirements toward the bachelor’s degree. Credit for 100-level mathematical sciences courses cannot be applied toward the mathematical sciences courses required for the major in mathematical sciences.

Mathematical sciences majors must complete the following requirements:

A. Complete one of the following sequences:

1. BIOL 151 and 152 and BIOZ 151 and 152 Introduction to Biological Science and Laboratory I and II
2. CHEM 101-102 and CHEZ 101 and 102 General Chemistry and Laboratory I and II
3. PHYS 207 and 208 University Physics I and II or PHYS 201-202 General Physics

B. Complete another course in the natural sciences that is not from the general education science and technology list. This course must be in a science different from the sequence chosen in A above.

**Mathematics core.** All students in the mathematical concentrations are required to take the following courses:

Note: A grade of C or better is required in courses/credits marked with an asterisk (*).

- MATH 200-201 Calculus with Analytic Geometry*
- MATH 255 Introduction to Computational Mathematics or CMSC 245 Introduction to Using Programming C++
- MATH 300 Introduction to Mathematical Reasoning*
- MATH 307 Multivariate Calculus*
- MATH 310 Linear Algebra*
- MATH 490 Mathematical Expositions
- MATH 507 Analysis I
- STAT 212 Concepts of Statistics

**Statistics core.** All students in the statistical sciences or operations research concentrations must take the following courses:

- MATH 200-201 Calculus with Analytic Geometry
- MATH 307 Multivariate Calculus
- MATH 310 Linear Algebra
- STAT 212 Concepts of Statistics

**Concentrations**

By completing the listed requirements, students may obtain a designation on their transcripts that their study has emphasized one of the following concentrations. Students may choose to meet the requirements of more than one concentration.

**B.S. in Mathematical Sciences/applied mathematics concentration**

Note: A grade of C or better is required in courses/credits marked with an asterisk (*).

- MATH 301 Differential Equations*
- MATH 532 Ordinary Differential Equations I
- MATH 533 Partial Differential Equations I

Either MATH 501 Introduction to Abstract Algebra or MATH 525 Introduction to Combinatorial Mathematics

Nine additional upper-level credits in mathematics, statistics, operations research or computer science courses, at least one of which must be at the 500 level, or three credits at the 500 level and complete a minor or a double major.

**B.S. in Mathematical Sciences/biomathematics concentration**

Note: A grade of C or better is required in courses/credits marked with an asterisk (*).

- MATH 301 Differential Equations*
- MATH/BNFO/BIOL 380 Introduction to Mathematical Biology
- MATH 532 Ordinary Differential Equations I
- MATH 533 Partial Differential Equations I
- MATH 582 Computational Modeling in Mathematical Biology
- MATH 585 Biomathematics Seminar: ___ (2 credits)

Three additional upper-level credits in mathematics, statistics, operations research or computer science courses or complete a minor or a double major.

**B.S. in Mathematical Sciences/mathematics concentration**

Note: A grade of C or better is required in courses/credits marked with an asterisk (*).

- MATH 301 Differential Equations*
- MATH 501 Introduction to Abstract Algebra
B.S. in Mathematical Sciences/secondary teacher preparation concentration

MATH/OPER 327 Mathematical Modeling
MATH 504 Algebraic Structures and Functions
MATH 505 Modern Geometry
MATH 530 The History of Mathematics
MATH 554 Using Technology in the Teaching of Mathematics

Six additional upper-level credits in mathematics, statistics, operations research or computer science courses or complete a minor or a double major which could be in education.

B.S. in Mathematical Sciences/operations research concentration

Note: A minimum grade of C is required in courses/credits marked with an asterisk (*).

CMSC 245 Introduction to Programming Using C++ and CMSC 246 Advanced Programming Using C++ or CMSC 255 Introduction to Programming and CMSC 256 Data Structures and Object Oriented Programming
MATH 300 Introduction to Mathematical Reasoning*
MATH 301 Introduction to Abstract Algebra* or MATH 307 Bridge to Modern Analysis* or MATH 509 General Topology I*
OPER/MATH 327 Mathematical Modeling*
OPER 427 Deterministic Operations Research*
OPER 428 Stochastic Operations Research*
OPER/STAT 490 Developing Professional Skills in Operations Research and Statistics*
STAT/MATH 309 Introduction to Probability Theory*
STAT 303 Introduction to Stochastic Processes*

Three additional courses chosen from the following list:
CMSC 302 Introduction to Discrete Structures
CMSC 303 Introduction to the Theory of Computation
CMSC 391 Topics in Computer Science†
CMSC 401 Algorithm Analysis with Advanced Data Structures
INFO 364 Database Systems
MATH 301 Differential Equations
MATH 305 Elementary Number Theory
MATH/BNFO/BIOL 380 Introduction to Mathematical Biology
MATH 391 Topics in Mathematics†
MATH 407 Advanced Calculus
MATH 501 Introduction to Abstract Algebra
MATH 507 Bridge to Modern Analysis
MATH 508 Analysis II
MATH 509 General Topology I
MATH 510 General Topology II
MATH 511 Applied Linear Algebra
MATH 512 Complex Analysis for Applications
MATH 514 Applications of Statistics*
MATH 515 Numerical Analysis I
MATH/OPER 520 Game Theory and Linear Programming
MATH 525 Introduction to Combinatorial Mathematics
MATH 532 Ordinary Differential Equations I
MATH 533 Partial Differential Equations I
MATH 534 Applied Discrete Dynamical Systems
MATH/OPER 527 Mathematical Modeling
OPER 427 Deterministic Operations Research
OPER 428 Stochastic Operations Research
OPER 591 Topics in Operations Research†
STAT 314 Applications of Statistics†
STAT 321 Introduction to Statistical Computing
STAT 391 Topics in Statistics†
STAT 404 Introduction to Statistical Inference†
STAT 435 Industrial Statistics†
STAT 445 Analyses of Dependent Data
STAT/BIOS 513 Mathematical Statistics I
STAT/BIOS 514 Mathematical Statistics II
STAT/BIOS 523 Nonparametric Statistical Methods
STAT 541 Applied Statistics for Engineers and Scientists†

† Special topics courses require prior approval from the department chair or the student’s adviser.

With the approval of the departmental Undergraduate Credentials Committee and the adviser, students can design their own plan of study, which also will result in a Bachelor of Science in Mathematical Sciences. This student-planned curriculum must contain at least 24 credits in upper-level (300- to 500-) mathematical sciences courses.

Double major

Students who meet the requirements for two of the concentrations within the mathematical sciences curriculum can receive a double major. To initiate a double major, students must obtain the appropriate form from the Office of Records and Registration.
The Bachelor of Interdisciplinary Studies provides opportunities for students to combine disciplines in unique ways. Students can apply for a nontraditional, individualized and interdisciplinary course of study by designing their own curriculum. (For a detailed description of the individualized interdisciplinary studies program offered through the University College, see the program page in this bulletin.) Students also may apply for a prescribed interdisciplinary specialization: the liberal studies for early and elementary education major that coordinates with the Extended Teacher Preparation Program administered jointly by the College of Humanities and Sciences and the School of Education. The program descriptions and curriculum outlines may be accessed through the program search feature or by following the links above.

### Liberal studies for early and elementary education

**Helen Ruth Aspaas**  
Associate Professor and Program Director

To become an elementary school teacher, students are required to declare the liberal studies for early and elementary education major. The major is the undergraduate part of the five-year Extended Teacher Preparation Program. The LSEE major requires a minimum of 120 credits within a highly structured, preprofessional program that combines with the Master of Teaching in the Extended Teacher Preparation Program associated with the School of Education. Successful completion of the LSEE major results in a Bachelor of Interdisciplinary Studies degree, which is awarded simultaneously with the M.T.

The LSEE curriculum is carefully articulated to provide interdisciplinary course work and in-school learning experiences which prepare students to teach at the elementary level (P-6). A number of general education courses are either required or recommended as electives to prepare for the core curriculum of advanced courses in this liberal studies major and the Extended Teacher Preparation Program that follows. Students in this major benefit from belonging to a community of learners.

The LSEE major is separated into two divisions: foundation level and upper level. Students are first admitted to the foundation level after review of their SAT scores and GPA. Entering freshmen should have a minimum GPA of 2.5; and transfer or change-of-major students are also required to have a minimum GPA of 2.5 to be admitted. Advancement to upper-level status requires 60 or more credits (including TEDU 101 and the classes listed in boxes 1-7 on the general education requirements listed on the LSEE graduation check sheet available from the LSEE advising office and posted on the LSEE Blackboard site), a minimum GPA of 2.8, and a passing grade on Praxis I or its alternatives. Information on Praxis I or its alternatives is available at the School of Education Office of Student Services.

Students cannot take the following LSEE courses until they have advanced to upper-level status: HPEX 390, INSC 310, MATH 303, MATH 362, STAT 312, TDED 307, TDED 351, TDED 411 (or ARTE 301), and the TDED 310 block that consists of TDED 310 Practicum (A), TDED 410, TDED 414 and TDED 426. After completing at least 75 credits, LSEE students with upper-level status can enter the School of Education's Extended Teacher Preparation Program. Successful completion of the LSEE major results in a Bachelor of Interdisciplinary Studies degree, which is awarded simultaneously with the M.T.

A minor in statistics consists of at least 18 credits offered by the Department of Mathematics and Applied Mathematics and the Department of Statistical Sciences and Research. These credits include a minimum of three credits of calculus and nine upper-level credits in statistics courses. It is strongly recommended, though not required, that students with a minor in statistics take MATH 211 Mathematical Structures and STAT 212 Concepts of Statistics. The required credits may not be fulfilled with any of STAT 208, 210, 312 or any 100-level course.

A minimum GPA of 2.0 must be achieved in the minor. Mathematical sciences majors cannot minor in statistics.

### Bachelor of Interdisciplinary Studies Program

A minor in statistics consists of at least 18 credits offered by the Department of Mathematics and Applied Mathematics and the Department of Statistical Sciences and Research. These credits include a minimum of three credits of calculus and nine upper-level credits in statistics courses. It is strongly recommended, though not required, that students with a minor in statistics take MATH 211 Mathematical Structures and STAT 212 Concepts of Statistics. The required credits may not be fulfilled with any of STAT 208, 210, 312 or any 100-level course.

A minimum GPA of 2.0 must be achieved in the minor. Mathematical sciences majors cannot minor in statistics.
**General education requirements:** Complete the following courses that satisfy the university core curriculum requirements and the general education requirements of the College of Humanities and Sciences. *(44-54 credits)*

1. **Writing:** *(9 credits)*  
   Complete each course.  
   - UNIV 111 Focused Inquiry I  
   - UNIV 112 Focused Inquiry II  
   - UNIV 200 Writing and Rhetoric or research and academic writing course

2. **Mathematics and statistics:** *(3 credits)*  
   - MATH 131 Introduction to Contemporary Mathematics

3. **Human, social, and political behavior:** *(3-4 credits)*  
   Choose one course.  
   - ANTH/INTL 103 Introduction to Anthropology  
   - HUMS 300 Great Questions of the Social Sciences  
   - POLI 103 U.S. Government  
   - PSYC 101 Introduction to Psychology  
   - SOCY 101 General Sociology

4. **Science and technology:** *(4 credits)*  
   Complete:  
   - BIOL 101 Biological Concepts and BIOZ 101 Biological Concepts Laboratory  
   - or BIOL/ENVS 103 Environmental Science

5. **Diverse and global communities:** *(3 credits)*  
   Choose one course.  
   - INTL 101 Human Societies and Globalization  
   - MASC/INTL 151 Global Communications  
   - POLI/INTL 105 International Relations  
   - RELS 108 Human Spirituality

6. **Literature and civilization:** *(3 credits)*  
   Choose one course.  
   - ENGL 215 Readings in Literature  
   - HIST 201 The Art of Historical Detection  
   - HUMS 250 Reading Film  
   - PHIL 201 Critical Thinking About Moral Problems  
   - WRLD 203/INTL Cultural Texts and Contexts  
   - WRLD 230 Introduction to World Cinema

7. **General education electives:** *(6-7 credits)*  
   Choose one course from:  
   - PHYS 103 Elementary Astronomy  
   - CHEM 110 Chemistry and Society  
   - INSC 201 Energy  
   and  
   - Choose an additional course from 3, 5 or 6 above.  
   (RELS 108 Human Spirituality is recommended)

8. **General education modules:** *(4 credits)*  
   Complete the following courses.  
   - TEDU 411 Integrating the Arts in Curriculum for Young Children  
   - or ARTE 301 Art for Elementary Teachers  
   - HUMS 202 Choices in a Consumer Society

9. **Foreign language:** *(0-8 credits)*  
   Students must demonstrate competency through the 102 level by previous high school background or placement test or courses. *(Spanish recommended)*

10. **Senior capstone:** *(9 credits)*  
    Complete each course (as a senior):  
    - TEDU 310 Practicum (A)  
    - TEDU 414 Curriculum and Methods for Early/Elementary Children  
    - TEDU 426 Teaching Reading and Other Language Arts

**Specific LSEE requirements:** *(75 credits)*  
(21 of these credits can be satisfied with courses that also satisfy general education requirements; these are denoted with a "5" superscript)

- TEDU 101 Introduction to Teaching  
- TEDU/FRLG 575 Intercultural Communication  
- UNIV 200 Writing and Rhetoric or research and academic writing course

**Math and statistics:** *(12 credits)*  
Complete each course.  
- MATH 303 Investigations in Geometry  
- MATH 361 Numbers and Operations  
- MATH 362 Algebra and Functions  
- STAT 312 Data Analysis and Statistics for Elementary Education

**Natural sciences:** *(10 credits)*  
Complete:  
- GEOG 203 Physical Geography and GEOZ 203 Physical Geography Laboratory  
- or GEOG 204 Physical Geography and GEOZ 204 Physical Geography Laboratory

- INSC 310 Content of Elementary Science  
- And choose one of the following:  
   - ENVS 301 Introduction to Meteorology  
   - ENVS 310 Introduction to Oceanography  
   - INSC 300 Experiencing Science  
   - INSC 301 Investigatory Mathematics and Science  
   - PHYS/MHIS 307 The Physics of Sound and Music

**Social studies:** *(18 credits)*  
Complete each course.  
- ECON 203 Introduction to Economics  
- GEOG 102 Introduction to Human Geography  
- HIST 101 Survey of European History  
- POLI 103 U.S. Government  
- RELS 108 Human Spirituality  
- or RELS/INTL 311 or 312 Religions of the World  
- SOCS 302 Diverse Families and Children in the United States  
- or SOCY/ANTH/WMNS 304 The Family

**Cross-cultural communication:** *(3 credits)*  
Choose one of the following courses.  
- ENGL/LING/WMNS 452 Language and Gender  
- ENGL/INTL 454/ANTH 450 Cross-cultural Communication  
- INTL 101 Human Societies and Globalization  
- INTL 493 International Studies Internship  
- MASC/INTL 151 Global Communications  
- POLI/INTL 105 International Relations  
- TEDU/FRLG 575 Intercultural Communication  
- Study abroad (approval required)

**Education courses:** *(32 credits; including 12 credits that are also included in the general education requirements; these are denoted with a “6” superscript)*  
Complete each course.  
- EDUS 301 Human Development and Learning  
- HPEX 390 Physical Education for the Elementary Teacher  
- TEDU 101 Introduction to Teaching  
- TEDU 310 Practicum (A)  
- TEDU 310 Practicum (B)  
- TEDU/ENGL 386 Children’s Literature  
- TEDU/ENGL 389 Teaching Writing Skills  
- TEDU 410 Classroom Management in Elementary Schools  
- TEDU 411 Integrating the Arts in Curriculum for Young Children or ARTE 301  
- Art for Elementary Teachers  
- TEDU 414 Curriculum and Methods for Early/Elementary Children  
- TEDU 426 Teaching Reading and Other Language Arts

**Electives:** *(3-19 credits)*  
(Consult with a program adviser regarding the selection of a possible minor or other coherent series of courses)

1. Required for LSEE majors  
2. Satisfies LSEE cross-cultural communication requirement  
3. Satisfies LSEE social studies requirement  
4. LSEE upper-level status required to take this class
### Interdisciplinary Degree Program in Science

Charlene D. Crawley  
Coordinator  
www.has.vcu.edu/science

The interdisciplinary program in science provides students with a broad, yet fundamental, grounding in the sciences. In addition to the spectrum of required mathematics and science courses, students select a concentration from biology, chemistry, health preparation/professional science or physics. The health preparation/professional science concentration is particularly suited for students interested in careers in the health professions.

Students completing this curriculum earn a Bachelor of Science in Science.

For information concerning the program and advising, contact the program coordinator. Selected faculty in biology, chemistry, mathematical sciences and physics are the academic advisers for this program.

### Science, Bachelor of Science (B.S.)

#### Degree requirements – Bachelor of Science in Science

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>28-30</td>
</tr>
<tr>
<td>Chemistry</td>
<td>33-34</td>
</tr>
<tr>
<td>Physics</td>
<td>29-30</td>
</tr>
</tbody>
</table>

#### Grade requirements

A minimum grade of C is required in each prerequisite course. A cumulative grade of C or higher is required for each concentration.

#### Biology concentration

- **Biology foundation**
  - BIOL and BIOZ 151 Introduction to Biological Science and Laboratory I 4
  - CHEM and CHEZ 101 General Chemistry and Laboratory I 4
  - ENVS/GEOG 301 Introduction to Meteorology or an upper-level science 3
  - ENVS/GEOG 310 Introduction to Oceanography or an upper-level science 3
  - MATH 151 Precalculus Mathematics (or placement) 4
  - MATH 200 Calculus with Analytic Geometry or STAT 314 or higher 3-4
  - PHYS 201 General Physics or PHYS 207 University Physics I 4-5
  - STAT 208 Statistical Thinking or STAT 210 Basic Practice of Statistics 3

#### Chemistry concentration

- **Chemistry foundation**
  - BIOL and BIOZ 101 Biological Concepts and Laboratory, BIOL/ENVS 103 Environmental Science, BIOL and BIOZ 151 Introduction to Biological Science and Laboratory I, or BIOL and BIOZ 152 Introduction to Biological Science and Laboratory II 4
  - CHEM and CHEZ 101 General Chemistry and Laboratory I 4
  - ENVS/GEOG 301 Introduction to Meteorology or an upper-level science 3
  - ENVS/GEOG 310 Introduction to Oceanography or an upper-level science 3
  - MATH 151 Precalculus Mathematics (or placement) 4
  - MATH 200 Calculus with Analytic Geometry 4
  - PHYS 201 General Physics or PHYS 207 University Physics I 4-5
  - STAT 208 Statistical Thinking or STAT 210 Basic Practice of Statistics 3

#### Physics concentration

- **Physics foundation**
  - PHYS 201 General Physics or PHYS 207 University Physics I 4-5
  - STAT 208 Statistical Thinking or STAT 210 Basic Practice of Statistics 3

#### Chemistry supplemental

- **CHEM and CHEZ 301 Organic Chemistry** 6
- **CHEM and CHEZ 309 Quantitative Analysis and Laboratory** 4
- **GEOG/ENVS 105 Physical Geology or GEOG 204 Physical Geography** 3
- **GEOZ 204 Physical Geography Laboratory** 1
- **PHYS 202 General Physics or PHYS 208 University Physics II** 4 or 5

#### Biology supplemental

- **BIOL and BIOZ 152 Introduction to Biological Science and Laboratory II** 3
- **BIOL and BIOZ 310 Genetics and Laboratory or other upper-level biology laboratory** 4 or 5
- **BIOL 317 Ecology** 3
- **CHEM and CHEZ 102 General Chemistry and Laboratory II** 4
- **GEOG/ENVS 105 Physical Geology or GEOG 204 Physical Geography** 3
- **GEOZ 204 Physical Geography Laboratory** 1
- **PHYS 202 General Physics or PHYS 208 University Physics II** 4 or 5
- **One upper-level animal and one upper-level plant course, with laboratories** 7
- **Upper-level biology elective** 3

### Degree requirements – Bachelor of Science in Science

A minimum grade of C is required in each prerequisite course. A cumulative grade of C or higher is required for each concentration.

#### Biology concentration

- **Biology foundation**
  - BIOL and BIOZ 151 Introduction to Biological Science and Laboratory I 4
  - CHEM and CHEZ 101 General Chemistry and Laboratory I 4
  - ENVS/GEOG 301 Introduction to Meteorology or an upper-level science 3
  - ENVS/GEOG 310 Introduction to Oceanography or an upper-level science 3
  - MATH 151 Precalculus Mathematics (or placement) 4
  - MATH 200 Calculus with Analytic Geometry or STAT 314 or higher 3-4
  - PHYS 201 General Physics or PHYS 207 University Physics I 4-5
  - STAT 208 Statistical Thinking or STAT 210 Basic Practice of Statistics 3

#### Chemistry concentration

- **Chemistry foundation**
  - BIOL and BIOZ 101 Biological Concepts and Laboratory, BIOL/ENVS 103 Environmental Science, BIOL and BIOZ 151 Introduction to Biological Science and Laboratory I, or BIOL and BIOZ 152 Introduction to Biological Science and Laboratory II 4
  - CHEM and CHEZ 101 General Chemistry and Laboratory I 4
  - ENVS/GEOG 301 Introduction to Meteorology or an upper-level science 3
  - ENVS/GEOG 310 Introduction to Oceanography or an upper-level science 3
  - MATH 151 Precalculus Mathematics (or placement) 4
  - MATH 200 Calculus with Analytic Geometry 4
  - PHYS 201 General Physics or PHYS 207 University Physics I 4-5
  - STAT 208 Statistical Thinking or STAT 210 Basic Practice of Statistics 3

#### Physics concentration

- **Physics foundation**
  - PHYS 201 General Physics or PHYS 207 University Physics I 4-5
  - STAT 208 Statistical Thinking or STAT 210 Basic Practice of Statistics 3

The interdisciplinary program in science provides students with a broad, yet fundamental, grounding in the sciences. In addition to the spectrum of required mathematics and science courses, students select a concentration from biology, chemistry, health preparation/professional science or physics. The health preparation/professional science concentration is particularly suited for students interested in careers in the health professions.

Students completing this curriculum earn a Bachelor of Science in Science.

For information concerning the program and advising, contact the program coordinator. Selected faculty in biology, chemistry, mathematical sciences and physics are the academic advisers for this program.

### Science, Bachelor of Science (B.S.)

Degree requirements – Bachelor of Science in Science

Grade requirements

Chemistry concentration

Chemistry supplemental

Biology supplemental

Health preparation/professional science concentration

Health preparation/professional science foundation

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5 Satisfies a general education requirement

6 These credits are counted with those for the general education requirements.
Biol and Bioz 152 Introduction to Biological Science and Laboratory II 3
Bio 341/Anth 301 Human Evolution or an upper-level science 3
Chem and Chez 101 General Chemistry and Laboratory I or Chez 110 Chemistry and Society* 3
Insc 300 Experiencing Science or Env/Engr 385 Nature Writing or an upper-level science 3
Math 151 Precalculus Mathematics (or placement) 4
Math 200 Calculus with Analytic Geometry or Mgmt 212 Differential Calculus or Stat 314 or higher 4
Phy and Phy 101 Foundation of Physics and Laboratory, Phy 107 Wonders of Technology or Phy 201 General Physics 4
Stat 208 Statistical Thinking or Stat 210 Basic Practice of Statistics 3

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* Recommended among options

Health preparation/professional science supplemental
Bio 317 Ecology, Bio 332/Env 330 Environmental Pollution, Env/Phy 315 Energy and Environment, or upper-level science 3
Env/Geog 401 Meteorology and Climatology 3
Env/Geog 411 Oceanography or Env 310 Introduction to Oceanography or upper-level science 3
Geog/Env 105 Physical Geology or Geog 204 Physical Geography (choose one) and Geoz 204 Physical Geography Laboratory or a 200-level science with laboratory 4
Phy 103 Elementary Astronomy, and Phy 103 Elementary Astronomy Laboratory or Introduction to Pre-Health topics course (choose one), or a 200-level science with laboratory 4
A second introductory foundation course (with laboratories) in two of the following three areas: biology, chemistry or physics 8-10
Two additional courses at the 200-level or higher in mathematics, science, teaching mathematics and/or science with adviser's approval [Recommended upper-level courses are Chem 403, Env 335, Hum 391 (Science Education in Urban Environment topic only), Lfsc/Rel 401, Edus 300 and/or Edus 301 may be used if student is preparing for teaching.] 6
Ethics or other health-related science 3
Research, internship, co-op or upper-level service-learning experience 3

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Physics supplemental
Math 201 Calculus with Analytic Geometry 4
Math 301 Differential Equations 3
Math 307 Multivariate Calculus 3
Phys 208 University Physics II 5
Phys 301 Classical Mechanics I 3
Phys 320 Modern Physics 3
Phys 320 Modern Physics Laboratory I 1
Phys 450 Senior Physics Laboratory (WI) 9
An additional nine credits taken from any of the following courses:
Chem 102 General Chemistry 3
Chem 202 General Chemistry Laboratory II 3
Math/Oper 327 Mathematical Modeling 2
Phys 103 Elementary Astronomy 3
Phys 103 Elementary Astronomy Laboratory or any course allowable for the B.S. in Physics or a science elective approved by adviser 3
Phys/Mhis 307 The Physics of Sound and Music 3

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L. Douglas Wilder School of Government and Public Affairs

The L. Douglas Wilder School of Government and Public Affairs is a creative, interdisciplinary grouping of programs in the social sciences and professional arenas that provides students with the knowledge, skills and experience necessary for success in public service.

The Wilder School brings together faculty from multiple disciplines that share a common interest in public affairs. The faculty includes individuals with strong research and analytical skills and with substantive expertise in such fields as criminal justice, economics, homeland security, political science, public administration, sociology, urban planning and community development. These faculty members are committed to producing cutting-edge research and public service that can bridge the gap between theory and practice and to providing high quality, innovative and nationally competitive degree programs for our students.

To achieve this mission, the Wilder School actively fosters and promotes a wide range of endeavors, including the establishment of interdisciplinary undergraduate and graduate programs, and develops close ties with other related university programs. The Wilder School is an intellectually exciting place committed to having a genuine impact on public policy and providing an intellectually stimulating education for future public affairs professionals who share in our commitment.

Administration
923 West Franklin Street
P.O. Box 842028
Richmond, Virginia 23284-2028
(804) 828-2292
Fax: (804) 827-1275
www.wilder.vcu.edu

Niraj Verma
Professor and Director
Sarah Jane Brubaker
Associate Professor and Associate Director
Franklin Wallace
Associate Director for Operations
John S. Mahoney
Associate Professor and Undergraduate Program Coordinator
Richard Huff
Assistant Professor and Graduate Program Coordinator
Program offerings

The school offers a variety of educational opportunities. Students may pursue seven undergraduate programs and an additional eight minors. Graduate programs provide options for full-time students and for practicing professionals interested in enhancing their skills or engaging in graduate-level work on a part-time basis.

Current graduate offerings include nationally recognized master’s programs and 12 graduate-level certificates, as well as a doctoral degree program administered by the Center for Public Policy. Wilder School programs include:

**Baccalaureate degrees**
- Bachelor of Science in Criminal Justice
- Bachelor of Science in Economics (with the Department of Economics in the School of Business)
- Bachelor of Arts in Homeland Security and Emergency Preparedness
- Bachelor of Arts in International Studies (with the School of World Studies)
- Bachelor of Arts in Political Science
- Bachelor of Science in Sociology
- Bachelor of Science in Urban and Regional Studies

**Minors**
- Criminal justice
- Economics
- Homeland security and emergency preparedness
- Nonprofit management and administration
- Political science
- Public management
- Sociology
- Urban and regional studies

**Post-baccalaureate graduate certificates**
- Certificate in Applied Social Research
- Certificate in Criminal Justice
- Certificate in Gender Violence Intervention
- Certificate in Geographic Information Systems
- Certificate in Historic Preservation Planning
- Certificate in Nonprofit Management
- Certificate in Planning Information Systems
- Certificate in Public Management
- Certificate in Public Safety
- Certificate in Transportation Planning and Analysis
- Certificate in Urban Revitalization

**Master’s degrees**
- Master of Arts in Homeland Security and Emergency Preparedness
- Master of Public Administration
- Master of Science in Criminal Justice
- Master of Science in Sociology
- Master of Urban and Regional Planning

**Doctoral degree**
- Ph.D. in Public Policy and Administration (through the Center for Public Policy)

The school also offers two dual degree programs with the University of Richmond’s T.C. Williams Law School. Through these programs students can simultaneously obtain a law degree (J.D.) and either the Master of Public Administration or the Master of Urban and Regional Planning.

Internships are arranged with the legislative and executive branches of Virginia government, and with the advocacy and lobbying organizations associated with the state government. The program is offered in the spring semester and begins the first week of January, corresponding with the calendar of the Virginia General Assembly.

The select group of students participating in the program will assemble weekly in a policy-making seminar, GVPA 423, to hear from key leaders at the Capitol and to compare experiences from various internship placements. Students will receive three credits for the seminar, and three credits and a $1,000 stipend for GVPA 494, the internship. Both courses are required of all students in the Virginia Capital Semester. Additional related courses taken from the VCU curriculum are recommended. Given the demands of the internship, however, students should not exceed a total of 15 credit hours during the Virginia Capital Semester. The program is designed for full-time students, but if space is available, students who do not wish to take a full course load may be allowed to enroll in the internship and policy-making seminar for six credits.

The program is open to all undergraduate students from accredited colleges and universities, both public and private, including those from colleges and universities in other states. Virginia Capital Semester also is open to graduate students on a case-by-case basis. Acceptance into the program is competitive. Program participants are selected by a committee comprised of faculty members and state officials, with preference given to full-time students who will have advanced sophomore, junior or senior standing at the time of enrollment in the program. Contact information, application procedures and deadlines are available on the Virginia Capital Semester Web site: [www.vcu.edu/capitalsemester/about.html](http://www.vcu.edu/capitalsemester/about.html).

**Wilder School Scholars**

Chris Saladino
Director

Students in any Wilder School undergraduate major may apply for Wilder School Scholar status upon completion of their freshman year. Students must have a minimum 3.5 cumulative GPA or a 3.75 GPA in their major to be eligible to become Wilder School Scholars. Students must maintain this average in order to continue their Wilder School Scholar status. Transfer students must meet these same requirements after a minimum of one semester of VCU course work.

In order to graduate as Wilder School Scholars, students must:
- Maintain the GPA cited above.
- Complete GVPA 499 Honors Seminar, a three-credit Wilder School Scholars capstone course or an honors thesis through the Wilder School Undergraduate Research Opportunities Program.
- Complete at least 15 additional credits in Wilder School honors courses/variants/modules, with at least three of those credits completed each academic year, and at least three of those credits in an honors course outside the student’s major (but within the Wilder School).
- Attend at least three Wilder School events or seminars per academic year.

The Wilder School offers an array of honors courses each semester. With the exception of GVPA 499, which is limited in enrollment to Wilder School students, these courses are open to students from all majors, since they are offered in conjunctions with the Honors College. Wilder School honors course offerings will include:
- At least once per year, GVPA 499 Honors Seminar. The exact structure and content varies from year to year. The course will focus on a topic of broad interest to all Wilder School students and disciplines (violence, equity, justice, etc.).
- At least two three-credit honors courses each year.
- At least two honors sections of existing courses each year (generally these are sections of large, introductory-level courses).
- At least two honors variants in selected courses each year in which a student may receive honors credit while enrolled in a non-honors course by fulfilling additional requirements, including: more advanced readings; extra meetings with the professor and other honors students enrolled in the course; group projects with other honors variant students; or other activities as deemed appropriate by the instructor. These honors variants are distinguished by a separate section number and a title indicating honors status. Limits may be placed on the number of honors variant students in any single course.

Undergraduate information

**Virginia Capital Semester**

**Jen Thompson**
Director
923 West Franklin Street
P.O. Box 842028
Richmond, Virginia 23284-2028
(804) 828-2292
Fax: (804) 827-1275

[www.vcu.edu/capitalsemester](http://www.vcu.edu/capitalsemester)

Virginia Capital Semester offers qualified students from VCU and other universities the opportunity to experience an internship in the state government while continuing their studies on a full-time basis through course work at VCU.
• At least four 1.5-credit honors modules each year.
The Wilder School Scholars program is explicitly linked to the VCU Honors College. Students within the Wilder School may graduate with any one, or all, of three distinct levels of honors: honors in their individual majors (where available), Wilder School Scholar honors and University Honors. Students who graduate as Wilder School Scholars are designated as such at their graduation ceremonies, with a separate certificate, sash and other forms of recognition.

Students who wish to enter the Wilder School Scholars program or who seek additional information should contact the Wilder School Scholars director. Honors courses for each semester are listed in each semester in the Schedule of Classes.

Undergraduate Research Opportunities Program (UROP)
Jason K. Levy, Ph.D.
Director
The Undergraduate Research Opportunities Program cultivates and supports research partnerships between Wilder School undergraduates and faculty. The UROP offers students the chance to work on cutting-edge research, whether they join established research projects or pursue their own ideas. As UROP participants, undergraduates are involved in each phase of standard research activity: developing research plans, writing proposals, conducting research, analyzing data and presenting research results in oral and written form. UROP projects take place during the academic year, as well as over the summer, and research can be done in any of the Wilder School’s academic programs. Projects can last for an entire semester or may continue for a year or more. For their projects UROP students receive academic credit or pay, or work on a voluntary basis. The UROP experience enables students to become familiar with the faculty, learn about potential majors and investigate areas of interest. UROP participants gain practical skills and knowledge they eventually apply to careers after graduation or as graduate students. Most importantly, they become involved in exciting research.

Essential to all UROP projects are the following:
• Research work worthy of academic credit, regardless of whether or not credit is requested.
• Active communication between the UROP participant and a faculty supervisor, who is responsible for guiding the intellectual course of the student’s work.
• A research proposal: a student-authored statement of purpose that describes the planned research.
• Students completing a UROP experience are strongly encouraged to present their work at the annual Wilder School Student Research Conference (held each spring), through oral presentation, poster or video.
• Students may enroll in GVPA 495 Directed Study, a three-credit course, which can be counted one time toward any of the Wilder School’s undergraduate majors. (Students can take a total of six GVPA 495 credits during their undergraduate careers, but only three of those credits can count toward their major fields. Any additional GVPA 495 credits will count as upper-level electives.)
• Each semester/year, the Wilder School will provide several grants of up to $400 each to support UROP projects.

Eligibility and procedures
Students in any undergraduate major in the Wilder School who have a 3.25 or higher cumulative overall GPA, or a 3.5 GPA in their major, are eligible to participate in the UROP. Students also must have completed the UNIV 200 and research methods courses, with a minimum grade of “B” in each course in order to be eligible to participate in the program. As a rule, freshmen are not eligible for the program, and it is strongly recommended that sophomores wait until their junior or senior year to apply for a UROP experience. Each year, however, a small number of incoming freshmen with outstanding potential may be identified as eligible for early participation in the UROP; the GPA requirement and course prerequisites are waived for these freshmen participants.

Students wishing to enter the UROP or seeking additional information should contact the Wilder School UROP director.

Wilder School courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

The L. Douglas Wilder School of Government and Public Affairs offers courses in the following areas:

Use this link to see criminal justice (CRJS) courses.
Use this link to see government and public affairs (GVPA) courses.
Use this link to see homeland security and emergency preparedness (HSEP) courses.
Use this link to see political science (POLI) courses.
Use this link to see public administration (PADM) courses.
Use this link to see public policy and administration (PPAD) courses.
Use this link to see sociology (SOCY) courses.
Use this link to see urban studies and planning (URSP) courses.

Criminal Justice, Bachelor of Science (B.S.)
Jill A. Gordon, Ph.D.
Program Chair


The major objective of this degree program is to prepare students for effective professional careers in criminal justice, forensic crime scene investigation, public service and other helping professions, and/or prepare them to pursue studies in law and other related graduate programs. Career opportunities are available in federal, state, local and private justice-related endeavors.

These careers include law enforcement, crime scene investigation, juvenile justice, corrections and the courts. This program also prepares students to enter law school or to pursue graduate studies in criminal justice or in several of the human services, usually related to justice. This program offers and encourages in-service justice employees and others to enhance their professional career development through higher education.

Students majoring in criminal justice receive a broad educational background, professionally oriented courses in their special area of interest and various skill courses designed to enhance their career opportunities. Through core courses and electives in the major, students have the opportunity to orient their course work to fit their educational objectives and career plans.

It is essential that students seek and follow the advice of an adviser in the progression of the core courses, the selection of criminal justice electives and in the identification of complementary courses in other disciplines that can benefit the student and assist in the accomplishment of career goals. Whether the student is interested in general criminal justice, policing, crime scene investigation, legal studies, juvenile justice or corrections, faculty and advisers can assist in identifying the appropriate curriculum.

Degree requirements – Bachelor of Science in Criminal Justice

The Bachelor of Science in Criminal Justice requires a minimum of 120 credits, including 39 credits in criminal justice courses. Students will complete 21 credits in core courses and 18 credits in either the justice or the forensic crime scene investigation concentration. To fulfill the general education requirements of the College of Humanities and Sciences, students seeking a Bachelor of Science in Criminal Justice must complete STAT 210 Basic Practice of Statistics.

Criminal justice core – 21 credits
Required courses for all criminal justice majors.
CRJS 181 Introduction to Criminal Justice
CRJS 253 Introduction to Corrections
CRJS 254 Introduction to Policing
CRJS 355 Criminological Theory
CRJS 380 Research Methods in Criminal Justice
CRJS 475 Criminal Procedure
CRJS 480 Senior Seminar

Justice concentration requirements – 18 credits
This concentration is offered for those students who are interested in a broad theoretical and practical education in the field of criminal justice.
Students in this concentration are required to complete the criminal justice core as well as any six criminal justice electives.

Forensic crime scene investigation concentration requirements – 18 credits
This concentration is offered for those students who are interested in careers in crime scene investigation at the local, state or federal levels. Students in the concentration are required to complete the criminal justice core as well as six additional courses specified below.

Required courses for all forensic crime scene investigation concentration students:
CRJS 320 Principles of Criminal Investigation
CRJS 370 Criminalistics and Crime Analysis
CRJS 373 Crime Scene Evidence: Law and Trial Procedure
CRJS 425 Violent Crime Scene Investigation
Two CRJS 300- or 400-level criminal justice electives

Please note that CRJS 181 is a prerequisite for all required minor courses and that CRJS 492 and GVPA 493 are not available to those minoring in criminal justice.

Economics, Bachelor of Science (B.S.) [College of Humanities and Sciences]

Economics is the science of human choice, the study of how scarce resources are allocated among competing uses to satisfy human wants. Since many choices analyzed are made by or affect business decision-makers, economics is a unique blend of liberal arts and business. Therefore, the Department of Economics offers a Bachelor of Science in Economics conferred by the College of Humanities and Sciences with a core of liberal arts courses. The department also offers a Bachelor of Science in Economics conferred by the School of Business with a core of business courses.

Economics teaches students how to analyze data and information and how to think strategically about business decision-making. Because of their broad analytical, quantitative and decision-making skills, students who major in economics are sought for a wide array of positions in management and sales. For example, firms hire economics majors as bank examiners, consultants, financial advisers, managers, and sales personnel. Economics is excellent preparation for almost any job with the word “analyst” in its title — such as business, credit, economic, financial, market research or risk analyst. A degree in economics also is excellent preparation for entrepreneurship or for graduate studies in business, law or medicine.

Degree requirements
The curriculum for a Bachelor of Science in Economics requires a minimum of 120 credits, with at least 33 of those credits in the major and three credits in STAT 210 Basic Practice of Statistics.

Students majoring in economics must complete ECON 210-211 Principles of Economics; ECON 301 Microeconomics Theory; ECON 302 Macroeconomics Theory; ECON 307 Money and Banking; ECON 431 Labor Economics (as senior capstone); STAT 210 Basic Practice of Statistics; and an additional 15 credits of electives in upper-level (300-400) economics courses.

In addition to these requirements, students in this program also must take one course in computer science. Students also must complete MATH 141 Algebra with Applications to fulfill the general education mathematics requirement for the College of Humanities and Sciences.

Economics majors are strongly encouraged to take additional courses in statistics and mathematics, especially if they intend to pursue either careers as practicing economists or graduate study in economics or business. Recommended mathematics courses include one or more of the following courses: MATH 151 Precalculus Mathematics, MATH 200 Calculus with Analytical Geometry, MGMT 171 Mathematical Applications for Business and MGMT 212 Differential Calculus and Optimization for Business. Recommended statistics courses include one or more of the following courses: MGMT 302 Business Statistics, ECON 501 Introduction to Econometrics, STAT 212 Concepts of Statistics or STAT 314 Applications of Statistics. Students should consult with their advisers to determine which of these courses fit their particular interests and backgrounds.

In selecting approved electives to meet the general requirements of the College of Humanities and Sciences, students should select courses related to the economics major — specifically, courses in accounting, mathematics and statistics, philosophy, history, political science, sociology, anthropology, and finance. Students should focus their electives on one or two of these subjects.

Juniors, seniors and graduate students who have completed baccalaureate degrees are eligible for enrollment in most upper-level (300-400) economics and business courses.

Homeland Security and Emergency Preparedness, Bachelor of Arts (B.A.)

John M. Aughenbaugh
Instructor and Program Coordinator
www.wilder.vcu.edu/academic/security/index.html

Emergency preparedness has always been a critical aspect of governmental policy at the federal, state and local levels. Response to natural disasters — floods, hurricanes, tornadoes, earthquakes, outbreak of infectious disease — requires pre-disaster planning, mid-disaster operations and postdisaster reconstruction that can only be carried out successfully through a partnership between all levels of government and between the public sector, private sector and civil society. Since the Sept. 11, 2001 attacks in New York, Virginia and Pennsylvania the concept of emergency preparedness has been expanded to include the task of homeland security — protecting the U.S. from terrorist-caused disasters. Policy planners and operational responders at all levels of government who had previously focused upon natural disasters now have the added responsibility of preparing for and mitigating the effects of politically inspired terrorist violence.

The program in homeland security and emergency preparedness recognizes this dual nature and is designed to give students both theoretical and practical knowledge that will prepare them for the following: 1) private- or public-sector employment in the expanding area of homeland security as it relates specifically to international and domestic security, as well as emergency preparedness for both security and nonsecurity-related incidents and/or 2) further study in government, international affairs, law enforcement, policy planning or law.

Students will study homeland security and emergency preparedness from a number of perspectives: emergency planning/management principles and practicalities; the nature and effects of natural disasters; the nature of the terrorist threat to the U.S. from both foreign and domestic organizations, including terrorist motives, methods and history; counterterrorism policies ranging from law enforcement to intelligence to the use of military force; vulnerability assessment of public and private infrastructure and institutions; critical infrastructure protection; ethical, constitutional, law enforcement and civil liberties issues related to the prevention of terrorist attacks through surveillance, immigration restrictions and detention; public safety legal questions that arise during governmental responses to natural disaster; intelligence analysis of domestic and international threats; and policy-making topics, such as organizational design and management, interagency processes, and intergovernmental coordination and cooperation within emergency preparedness and counterterrorism institutions at the local, state, federal and international level.

The knowledge and skills acquired through this course of study will enable students to continue their studies at law school or graduate school in a number of
areas: business, criminal justice, geography, international affairs, political science, public administration, sociology and urban planning. Students also will be able to pursue employment opportunities in various fields, such as within the government at the local, state and federal level in homeland security and emergency planning/ response; law enforcement; intelligence; for-profit and nonprofit research and consultancy; and private sector employment with any business that requires emergency planning expertise to protect critical infrastructure.

Degree requirements – Bachelor of Arts in Homeland Security and Emergency Preparedness

Collateral requirements

Honors in homeland security and emergency preparedness

Degree requirements – Bachelor of Arts in Homeland Security and Emergency Preparedness

The curriculum for the Bachelor of Arts in Homeland Security and Emergency Preparedness requires a minimum of 120 credits, with at least 36 of those credits in homeland security and emergency preparedness.

Along with the general education requirements of the College of Humanities and Sciences and Monroe Park Campus requirements, students must complete the following 30 credits of core courses. Students are required to take HSEP 101 Homeland Security and Emergency Preparedness, POLI 103 U.S. Government and POLI/INTL 105 International Relations as prerequisites to HSEP 301/CRJS 367 Terrorism, HSEP 302/CRJS 368 Emergency Planning and Incident Management, and HSEP 301 and HSEP 302 are prerequisites to all other upper-level HSEP core courses. These prerequisites can be waived with permission of the instructor.

HSEP core courses

HSEP 101 Homeland Security and Emergency Preparedness
POLI 103 U.S. Government
POLI/INTL 105 International Relations
HSEP 301/CRJS 367 Terrorism
HSEP 302/CRJS 368 Emergency Planning and Incident Management
HSEP 310 Risk and Vulnerability Assessment
HSEP 311 Strategic Planning for Homeland Security and Emergency Preparedness
HSEP 320/CRJS 375 The Intelligence Community and the Intelligence Process
HSEP 490 Senior Seminar

Students must then select their remaining six credits from the following course list. Students also may count three credits of internship and three credits of independent study toward the degree requirement.

HSEP elective courses

CRJS 300 Forensic Criminology
CRJS 320 Principles of Criminal Investigation
CRJS 370 Criminalistics and Crime Analysis
CRJS 373 Crime Scene Evidence: Law and Trial Procedure
CRJS 463 Comparative Criminal Justice Systems
CRJS 475 Case Studies in Criminal Procedure
FIRE 330 Regulatory Aspects of Safety and Risk Control
FIRE 332 System Safety
FIRE 333 Risk and Insurance
FIRE 334 Incident Investigation and Analysis
FIRE 430 Issues in Risk Management and Insurance
GVPA 493 Government and Public Affairs Internship
HSEP 391 Topics in Homeland Security and Emergency Preparedness
HSEP 491 Advanced Topics in Homeland Security and Emergency Preparedness
HSEP 492 Independent Study
POLI 310 Public Policy
POLI 322 State and Local Government and Politics
POLI 329 Intergovernmental Relations
POLI/INTL 351 Governments and Politics of the Middle East
POLI/INTL 353 Latin American Governments and Politics
POLI/INTL 362 International Organizations and Institutions
POLI/INTL 363 U.S. Foreign Policy
URSP 310 Introduction to Urban and Regional Planning
URSP/ENVS/GEOG 332 Environmental Management
URSP 413 Policy Implementation
URSP/ENVS/GEOG 521 Introduction to Geographic Information Systems
URSP 552 Urban Transportation Systems

Collateral requirements

In addition to the homeland security and emergency preparedness courses required for the Bachelor of Arts degree, students must complete the study of a foreign language through the intermediate level (202 or 205) through courses or placement. As a prerequisite for HSEP 310 Risk and Vulnerability Assessment, STAT 210 should be used to fulfill general education requirements for statistics.

Honors in homeland security and emergency preparedness

Homeland security and emergency preparedness majors can earn honors within the program by completing HSEP 490 Senior Seminar with an “A” grade and graduating with an overall 3.0 GPA and a 3.3 GPA in courses credited toward the 36 credits of the homeland security and emergency preparedness major.

International Studies, Bachelor of Arts (B.A.)

Lynn Nelson
Professor and Program Coordinator in the Wilder School

Gina Kovarsky
Assistant Professor and Program Coordinator in the School of World Studies

The International Studies Program is designed to increase students’ knowledge about the institutions, traditions, values, aspirations and concerns of people in different countries and regions of the world. Its broad-based, interdisciplinary curriculum gives students the option of focusing on several different themes and their combinations, depending on interests and career plans. These include political, social and economic systems, culture and religious traditions, diverse media, and language. To complete the major or the minor, students may choose to study questions and issues that confront the global community overall or may concentrate on a specific geographic area.

The Bachelor of Arts in International Studies will qualify students to follow a number of career paths, including business, community and government work in areas such as policy analysis, economic development, foreign service, international affairs, international development, foreign trade and finance. Students can also find opportunities in teaching and work with a variety of private public-service organizations. Further, an undergraduate degree in international studies provides an excellent background for the study of law and advanced graduate study in a number of social science and humanities disciplines, business or journalism.

Additional information about the international studies major and minors, including approved lists of courses for the various concentrations, is available from the international studies website at www.worldstudies.vcu.edu/intl.

Degree requirements – Bachelor of Arts in International Studies

To earn a Bachelor of Arts in International Studies, students must complete 120 course credits, at least 31 of which must be in the major, with a minimum GPA of 2.25. Students must take at least 21 credits in upper-level (300 or 400) INTL courses. The focus should be interdisciplinary, with no more than half of major course credits beyond the INTL core coming from any one traditional discipline (e.g., ANTH, POLI or SOCY).
Students should work with their advisers to establish a plan for a minor that will broaden their international studies perspectives. International studies majors are encouraged to complete the course requirements for a minor in one of the following fields: African studies, Arabic and Middle Eastern studies, anthropology, Asian and Chinese studies, economics, business (general business minor), French, geography, German, history, Italian studies, Mediterranean studies, political science, religious studies, Russian studies, sociology, Spanish or urban and regional studies. Students also may want to consider a second major. Advisers will work with students to explore the benefits of a double major and a minor.

All majors are required to complete the following core courses (10 credits):

- INTL 101 Human Societies and Globalization or INTL/POLI 105 International Relations (three credits)
- INTL 490 Seminar in International Issues (three credits)
- INTL 493 International Studies Internship or INTL 398 Directed Study Abroad (or other approved study-abroad experience) or an approved service-learning or independent study course (three credits)
- INTL 499 Senior Seminar (one credit)

Students must fulfill an experiential learning requirement through an approved internship, service-learning course or study-abroad program. Additionally, students must complete foreign language study through the advanced level (300, 305, 320 or 321) by course or placement, unless this level of instruction is not available in the chosen language. In such cases, the faculty adviser will assist the student in identifying appropriate language study options at other U.S. institutions or abroad. International studies students also must fulfill the college general education requirements for the Bachelor of Arts degree.

To major in international studies, students must take course work that fulfills the requirements for either a general international studies major (offered with a humanities emphasis in the World School or a social science emphasis in the Wilder School), or students must choose a major with a global studies concentration (with options in both the World School or Wilder School) or a geographical area studies concentration (available only through the World School). Students may choose the program of study that best fits their interests. The general international studies option is outlined below; concentration areas may be reached by the links to the right.

**General international studies major**
The following three courses (nine credits) are required:

1. INTL 101 Human Societies and Globalization (if not used as a core requirement) or INTL/POLI 105 International Relations (if not used as a core requirement)
2. INTL/SOCY 330 Global Societies: Trends and Issues
3. INTL/POLI 362 International Organizations and Institutions

In consultation with their advisers, students will be required to complete 12 additional credits in international studies that comprise a coherent set of courses aimed at deepening knowledge in a particular area. Students interested in completing these credits with a social science emphasis should consult with advisers in the Wilder School, while those interested in completing these credits with a humanities emphasis should consult with advisers in the World School.

**Area studies concentrations**
See the program page for the B.A. in International Studies for a full description of degree requirements.

Area studies students must complete foreign language study of the region through the advanced level (300, 305, 320 or 321) and an approved language and cultural immersion experience in that region.

**European studies**
The following three courses (nine credits) are required:

1. HIST 101 Survey of European History
2. HIST 336 Modern European Intellectual History
3. INTL/POLI 352 European Governments and Politics

Students are required to complete four courses (12 credits) from Concentration List J as approved by the students’ advisers. (See www.has.vcu.edu/wld/academics/minors/area_studies/listj.html for list.)

**Latin American studies**
The following three courses (nine credits) are required:

1. HIST 109 or 110 Survey of Latin American History
2. INTL/ANTH 349 Rethinking a Continent: Latin America
3. SPAN 321 Latin American Civilization I or INTL/POLI 353 Latin American Governments and Politics

Students are required to complete four courses (12 credits) from Concentration List G as approved by the students’ advisers. (See www.has.vcu.edu/wld/academics/minors/area_studies/listg.html for list.)

**Global studies concentrations**
See the program page for the B.A. in International Studies for a full description of degree requirements.

Students may enroll in the international studies program in either the School of World Studies or the L. Douglas Wilder School of Government and Public Affairs. Those who choose to follow a global studies concentration may choose from the emphasis areas below.

**School of World Studies**
- International social justice studies
- World cinema

**L. Douglas Wilder School of Government and Public Affairs**
- Comparative studies
- International institutions and globalization

**Global studies concentrations in the World School**

**International social justice studies**
The following three courses (nine credits) are required:

1. RELS 340/INTL 341 Global Ethics and the World’s Religions
2. WRLD 210 International Social Justice Studies
3. WRLD 220 Human Rights and Literature

Students are required to complete two to four courses (six to 12 credits) from Concentration List M as approved by the students’ advisers. (See www.has.vcu.edu/wld/academics/majors/intstudies/listm.html for list.)

**World cinema**
The following courses are required:

1. ANTH 331 Public Culture: Anthropology Through Film or RELS 422 Religion and Film
2. Select three credits from: ARTH 270 or 271 History of the Motion Picture, ARTH 471 Film Theory or ENGL 385 Fiction into Film
3. WRLD 230 Introduction to World Cinema
4. WRLD 330 Introduction to Film Studies
5. WRLD 422 National Cinema (must be repeated for 6 credits with different topics)
6. WRLD 430 Film and the City
7. WRLD 499 Senior Capstone Seminar

**Global studies concentrations in the Wilder School**

**Comparative studies**
The following three courses (nine credits) are required:

1. ANTH/INTL 457 Comparative Perspectives on Cultures and Societies
2. INTL/SOCY 330 Global Societies: Trends and Issues
3. INTL/POLI 361 Issues in World Politics or INTL/POLI 362 International Organizations and Institutions
Students are required to complete four courses (12 credits) from Concentration List N as approved by the students’ advisers. (See www.has.vcu.edu/wld/academics/majors/intstudies/listn.html for list.)

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International institutions and globalization

The following three courses (nine credits) are required:
1. INTL/AFAM/ECON 315 Economic Development
2. INTL/POLI 361 Issues in World Politics
3. INTL/POLI 362 International Organizations and Institutions

Students are required to complete four courses (12 credits) from Concentration List B as approved by the students’ advisers. (See www.has.vcu.edu/wld/academics/majors/global_studies/listb.html for list.)

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Nonprofit management and administration, minor in

The minor in nonprofit management and administration is designed for students preparing for entry-level employment in nonprofit and non-governmental organizations as managers, fundraisers and program evaluators. The minor emphasizes basic knowledge and skills needed to work in the nonprofit sector in the U.S. and abroad. It also prepares students for graduate study in public administration, law, urban planning and public policy, among others.

Minor requirements

The minor consists of 18 credits. All students must take the following courses:

- POLI 370 Nonprofit Organizations and Society
- POLI 372 Ethics, Law and Governance
- POLI 374 Financial Management for Nonprofits
- POLI 320/SOCY 320 Research Methods in the Social Sciences
- GVPA 493 Government and Public Affairs Internship*

Students must take one of the following courses as an elective.

- MGMT 331 Human Resource Management
- MGMT 319 Organizational Behavior
- MASC 323 Public Relations
- SLWK 230 Communication in the Helping Process

*An internship is required if the student meets a 2.5 grade point average in the major requirement. If the GPA requirement is not met, the student must take another 3-credit elective course from the list above.

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Political Science, Bachelor of Arts (B.A.)

Judyth L. Twigg
Associate Professor and Program Coordinator
www.pubapps.vcu.edu/gov/academics/default.asp?ID=96

The political science curriculum has two central objectives. It offers the student a broad liberal arts education along with a comprehensive understanding of the nature and functioning of the political process and government. It also provides a sound foundation for graduate study in political science, public administration and nonprofit management, or for careers that require knowledge of governance and the political process, such as law.

The political science program offers a Bachelor of Arts in Political Science as well as elective courses in political science for program majors and nonmajors, alike.

Degree requirements – Bachelor of Arts in Political Science

The curriculum for the Bachelor of Arts in Political Science requires a minimum of 120 credits, with at least 33 of those credits in political science. Students will complete 15 credits of core courses, 12 credits in one of the concentrations listed below and six additional political science credits chosen from the full list of political science courses available.

Political science core – 15 credits

- POLI 103 U.S. Government
- POLI/INTL 105 International Relations
- POLI 107 Political Theory

- POLI 109 Comparative Politics
- POLI 490 Senior Seminar

Civil and human rights concentration – Choose 12 credits

- POLI 302 Politics of the Civil Rights Movement
- POLI 314 U.S. Constitutional Law
- POLI 316 Women and the Law
- POLI 318 Politics of Race, Class and Gender
- POLI 319 Women and American Politics
- POLI 343 Black Political Thought
- POLI 345 African-American Politics
- POLI 366 Women and Global Politics

International relations concentration – Choose 12 credits

- POLI 358 Concepts of Comparative Government
- POLI 361 Issues in World Politics
- POLI 362 International Organizations and Institutions
- POLI 363 U.S. Foreign Policy
- POLI 364 Vietnam
- POLI 365 International Political Economy
- POLI 366 Women and Global Politics
- POLI 367 Terrorism
- POLI 452 Seminar in Politics of Developing Areas
- POLI 468 Seminar on Comparative Foreign Policy

Public policy and administration concentration – Choose 12 credits

- POLI 310 Public Policy
- POLI 311 Politics of the Environment
- POLI 321 City Politics
- POLI 322 State and Local Government and Politics
- POLI 323 Virginia Government and Politics
- POLI 329 Intergovernmental Relations
- POLI 331 Public Administration
- POLI 420 Seminar in Urban Politics
- POLI 432 Bureaucratic Politics

Politics and government concentration – Choose any 18 credits (300 level or above)

This concentration is offered for students who are interested in a broad theoretical and practical education in the field of political science. Students in this concentration are required to complete the political science core and then choose 18 credits in political science courses from among all upper-level political science courses available.

POLI 391/491 topics courses are elective courses; however, appropriate topics in these courses may count toward the 12 concentration credits with permission of the program coordinator. Up to six credits of GVPA 493 Government and Public Affairs Internship may count toward the 12 concentration credits with permission of the program coordinator. POLI 492 Independent Study will not count toward any of the 12 concentration credits.

Political science majors are strongly encouraged to take STAT 210 Basic Practice of Statistics to fulfill the college’s general education statistics requirement. In addition, political science majors are strongly encouraged to complete POLI/SOCY 320 Research Methods in the Social Sciences. With prior approval of the program coordinator, students can take three credits toward the political science major from courses offered by other departments. Students may count a maximum of six credits of internship and three credits of independent study toward the major.

Collateral requirements

In addition to the political science courses required for the Bachelor of Arts degree, students must complete the study of a foreign language through the intermediate level (202 or 205) by course or placement.

Honors in political science

Political science majors can earn honors in political science. Students earn honors status when they complete POLI 490 Senior Seminar with an “A” grade and graduate with an overall 3.0 GPA and a 3.3 GPA in political science.

Accelerated Bachelor of Arts (B.A.) in Political Science and Master of Public Administration (M.P.A.)

This program permits selected students to earn the B.A. and M.P.A. in a minimum of five years, by taking certain master’s-level courses during the senior year of
their undergraduate program. The program is restricted to students with strong credentials and a clear interest in a career in the public or nonprofit sector. To be eligible, a student must have completed 90 credits of course work and have an overall GPA of 3.0, with a GPA of 3.3 in political science courses. The accelerated program is limited to students majoring in political science who have a minimum of nine credit hours in political science courses.

To be considered for acceptance into the program and before enrolling in 600-level Master of Public Administration courses, a student must complete the graduate school application, submit standardized test scores and supply the supporting information required for admission. Upon being accepted into the accelerated program, a student must meet the same standards of performance as a graduate student that are described in detail in the “Satisfactory Progress” section of the Graduate Bulletin. To be considered for acceptance, a student must have completed all of the requirements for the degree, as stated in this bulletin. Guidance to students admitted to the accelerated program is given by the public administration program director. Students should contact the M.P.A. graduate director for more information about admission procedures.

To graduate with a bachelor’s degree, a student must complete 120 hours of course work. Of these credits, 33 must be in political science. Of the 33 political science credits, 15 are required (POLI 103 U.S. Government, POLI/INTL 105 International Relations, POLI 107 Political Theory, POLI 109 Comparative Politics and POLI 490 Senior Seminar). Students enrolled in the accelerated program may take up to six credits of graduate public administration courses in each of the final two semesters of their undergraduate course work. These courses are shared credits with the graduate program, meaning that they will be applied toward the undergraduate degree requirement and the graduate degree requirement. A maximum of 12 credits may be taken prior to the completion of the baccalaureate degree. The Bachelor of Arts degree will be awarded when the student has completed all the requirements for the undergraduate degree, which may include the 12 graduate public administration credits.

The graduate courses that may be taken in the public administration program once a student is admitted to the accelerated program are as follows:

- **PADM/GVPA 601 Principles of Public Administration** (may be used to meet the undergraduate major distribution requirement for U.S. politics and is a required course in the graduate program)
- **PADM 602 Public Administration Theory** (may be used to meet the undergraduate major distribution requirement for political theory and methodology, and is a required course in the graduate program)
- **PADM 607 Public Human Resource Management** (core requirement for the M.P.A.; elective for the undergraduate major)
- **PADM 609 Financial Management in Government** (core requirement for the M.P.A.; elective for the undergraduate major)
- **PADM/GVPA/CRJS/URSP 623 Research Methods for Public Administration** (may be used to meet the undergraduate major distribution requirement for political theory and methodology, and is a required course in the graduate program)
- **PADM 624 Quantitative Methods for Public Administration** (core requirement for the public administration degree; elective for the undergraduate major) or a PADM elective course (elective requirement for the M.P.A. and elective for the undergraduate major)
- **PADM 650 Principles of Nonprofit Management** (required for the concentration in nonprofit management and is an elective for the M.P.A. degree, and may fulfill an elective requirement in the undergraduate major)

All accelerated program students must have their course schedules approved by the graduate public administration program director prior to registration.

### Political science, minor in

A minor in political science consists of 18 credits, including POLI 103 U.S. Government, POLI/INTL 105 International Relations, and at least three upper-level (300-400) credits in each of the four areas of political science (comparative politics, international relations, political theory and methodology, and U.S. politics). See political science adviser for list of courses in each area. POLIT 492 Independent Study and GVPA 493 Government and Public Affairs Internship cannot be used to fulfill the 12 upper-level credits.

### Public management, minor in

A minor in public management is designed for students who wish to prepare for a variety of employment opportunities in government and related fields. It provides an overview of public affairs at the national, state and local levels. Its emphasis is on acquainting students with the political context of public administration, issues of particular importance in the private sector, and the complexity of planning and decision-making. By emphasizing both professional skill and analytical thinking, it offers the possibility to develop valuable workplace skills and analytical capabilities that may qualify graduates for professional opportunities with local, state or federal agencies, and an ultimate career in the public sector. A public management minor also is solid preparation for graduate study in law, public administration, urban planning, public policy and political science. Students in the minor may arrange an internship to provide experience and practical exposure to public management.

### Minor requirements

The minor consists of 18 upper-level credits. All students must take the following courses:

- POLI 310 Public Policy
- POLI 331 Public Administration
- URSP 322 Urban Finance
- URSP 413 Policy Implementation

In addition, two of the following electives are required:

- GVPA 493 Government and Public Affairs Internship (see adviser)
- POLI 321 City Politics
- POLI 322 State and Local Government and Politics
- POLI 329 Intergovernmental Relations
- URSP 310 Introduction to Urban and Regional Planning
- URSP 541 Urban Public Policy-making Processes

Note: Urban studies and geography students take POLI 321; political science students take URSP 541 or URSP 310.

### Sociology, Bachelor of Science (B.S.)

**Jennifer Johnson**
Associate Professor and Program Coordinator
www.wilder.vcu.edu/academic/sociology

The baccalaureate curriculum in sociology seeks to ensure that each student develops a solid foundation in the basic principles, theories and techniques of analysis in sociology. It also encourages students to pursue an interdisciplinary approach by incorporating course credit from closely related subject areas in other programs. Since students majoring in sociology vary in their interests and career goals, the curriculum allows for a great deal of flexibility in developing individual courses of study. Students who are interested in pursuing graduate studies in sociology usually will take more than the minimum number of upper-level courses. The program provides opportunities for involvement in faculty research through its course offerings, which include independent study, internships and honors research.

**Degree requirements – Bachelor of Science in Sociology**

- Undergraduate topics courses
- Independent study
- Honors in sociology

### Degree requirements – Bachelor of Science in Sociology

The Bachelor of Science in Sociology requires a minimum of 120 credits, with at least 30 of those credits in sociology and other approved courses. At least 24 upper-level (300-400) credits are required. SOCY 101 General Sociology, SOCY/ POLI 320 Research Methods in the Social Sciences and SOCY 402 Sociological Theory are required core courses in the sociology major.

To fulfill the general education requirements of the College of Humanities and Sciences, students seeking a Bachelor of Science in Sociology should complete STAT 210 Basic Practice of Statistics. At least 15 credits of the required 24 upper-level credits must be in upper-level sociology courses. The remaining nine required upper-level credits may be chosen from sociology courses or from the following approved list of related courses — six may be taken from ANTH or
SOCS courses; three may be taken from any of the remaining subject areas. (This list is revised periodically to reflect changes in course offerings. Check the school Web site for updated versions.)

**Anthropology**
- ANTH 301/BIOL 341 Human Evolution (WI)
- ANTH/INTL 305 Comparative Perspectives on Cultures and Societies
- ANTH/INTL 415 Economic Anthropology
- ANTH/RELS/INTL 425 Religion, Magic and Witchcraft (WI)

**Criminal justice**
- CRJS 355 Foundations of Criminal Justice
- CRJS/WMNS 382 Women in the Justice System

**Geography**
- GEOG/URSP 306 Economic Geography (WI)
- GEOG/ANTH 312 History of Human Settlement
- GEOG/INTL/URSP 340 World Cities Outside of North America

**Political science**
- POLI 303 Public Opinion, Polling and the Media
- POLI/AFAM/WMNS 318 Politics of Race, Class and Gender
- POLI/INTL 358 Concepts of Comparative Government
- POLI/INTL 365 International Political Economy (WI)

**Psychology**
- PSYC 310 Industrial Psychology
- PSYC 321 Social Psychology
- PSYC 323 Interpersonal Relations

**Religious studies**
- RELS/INTL 311, 312 Religions of the World
- RELS 334 Religion in Contemporary America

**Social science**
- SOCS 303 Marriage and Family Relationships
- SOCS 340 Human Sexuality
- SOCS 389 AIDS: Myths and Realities

**Urban studies**
- URSP 304 Urban Social Systems
- URSP/GEOG 306 Economic Geography
- URSP 315 The Evolution of American Cities
- URSP 316 Urban Life in Modern America
- URSP/GEOG/INTL 340 World Cities Outside North America
- URSP 350/FRLG 345/INTL 345 Great Cities of the World

**Undergraduate topics courses**
Topics courses in sociology, offered as SOCY 391, are an integral part of the program and provide a rare opportunity for the advanced student. Generally these courses are restricted to a small number of students who share specialized interests in a topic that is either too advanced or too limited in its general appeal to justify its inclusion as a standard offering. At least one such seminar is offered each semester and the topics course can be repeated for up to a maximum of 18 credits as long as there is no duplication of the topics.

**Independent study**
SOCY 492 Independent Study is designed for juniors and seniors capable of doing independent work on selected topics under the direction of specific faculty. For example, if a course is not regularly offered in a specific area of interest to a particular student, and if there are not enough students in the topics course, the student may, with the permission of the instructor, enroll in independent study. Students may earn a maximum of 12 credits in SOCY 492, but may not enroll for more than six credits per semester. All students entering these courses must have completed a minimum of 12 credits in sociology and achieved an overall sociology GPA of at least 2.7.

**Honors in sociology**
Majors in the sociology program may earn a Bachelor of Science degree with honors in sociology. The Sociology Honors program is available to outstanding senior majors and involves the preparation of a senior thesis during one of the last two semesters of the baccalaureate degree program. In order to participate in the program, students must meet program entrance requirements, identify a project mentor and receive approval for a project proposal. The project may involve any recognized sociological topic, theory or method that promises to enhance the honor student’s disciplinary perspective, skills and creativity. The project may involve an extension of work initiated in a course, an entirely new project or a collaborative project with the faculty mentor. If the project is an extension of the work initiated in a course or developed collaboratively with the mentor, the independent, separate, substantial development of the topic in the thesis should be evident. The thesis should reflect work of high quality for a senior-level course. The Honors Program Committee will award honors following acceptance of the thesis.

**Honors eligibility criteria and application procedure**
Students majoring in sociology are eligible to participate in the sociology honors program if they have maintained a 3.0 overall GPA and a 3.3 GPA in the major. Candidates should apply to the Sociology Honors Program Committee. Application materials consist of transcripts documenting the required GPAs, a description of the proposed project, which should not exceed three typed pages, and the name of the faculty member who has agreed to act as project mentor. Application must be made and project approval received in the semester preceding the one in which the research project will be conducted. The committee will review the application materials, meet with the candidate to discuss the project proposal and render an admission decision. Once admitted, program participants will enroll in an honors research course. The course may be included in the required hours for the major.

Submit applications to the Virginia Commonwealth University, Sociology Honors Program Committee, L. Douglas Wilder School of Government and Public Affairs, P.O. Box 842028, Richmond, VA 23284-2028. For further information, contact Dr. John Mahoney, program coordinator, undergraduate sociology program.

**Award of honors**
The completed senior thesis will be submitted to the Honors Program Committee following its acceptance by the faculty mentor and confirmation that the candidate has maintained the requisite grade-point averages. Upon submission of the thesis, the student will make an oral presentation to the committee summarizing the research procedures and findings. The committee will then evaluate the thesis for the award of honors. For acceptance, the thesis must be evaluated as deserving of a grade of “A” in SOCY 498 Honors Research Course. Acceptance of the thesis will earn an Honors Program Certificate from the program and notation of the student’s standing as an honors graduate on the final grade transcript. Honors students also will receive preferential consideration as applicants to the sociology master’s degree program.

**Accelerated Bachelor of Science (B.S.) and Master of Science (M.S.) in Sociology**
The accelerated B.S. and M.S. program allows qualified students with a major in sociology to earn both degrees in a minimum of five years by completing approved graduate courses during the senior year of their undergraduate program. The program will provide students with the opportunity to expand and deepen their knowledge of sociology, enhance their credentials for the job market and/or to prepare for further professional education. Students in the program may count up to 12 hours of graduate courses toward both the B.S. and M.S. degrees. Thus, the two degrees may be earned with a minimum of 144 hours instead of the 156 required if the degrees are pursued separately.

The program is restricted to students who have demonstrated a clear interest in sociology. Minimum qualifications for admittance to the program include completion of 90 undergraduate credit hours with a minimum GPA of 3.0, and a minimum of nine credit hours in sociology with a GPA of 3.3. Prior to being formally considered for admittance and before enrolling in graduate courses, the student must complete the graduate school application, submit GRE general aptitude scores and supply supporting information required for admission. All persons admitted to the program must meet the graduate student standards of performance, e.g., maintain a 3.0 GPA, and satisfactorily complete all requirements for the degree.

The graduate program coordinator will provide guidance of students in this program. Students who are interested in this program should consult with the director of graduate studies or the graduate program coordinator before they have completed 90 credits. Both may be contacted for more information about admission procedures.

Requirements for the Bachelor of Science in Sociology include the completion of a minimum of 120 credits. Students in the accelerated program may take up to six graduate sociology credits in each of the final two semesters of their undergraduate course work. These courses are shared credits with the graduate...
program, meaning that they will be applied to both undergraduate and graduate degree requirements. A maximum of 12 graduate credits may be taken prior to completion of the baccalaureate degree.

The Bachelor of Science degree will be awarded when the student has completed all requirements for the undergraduate degree, which may include the 12 graduate sociology credits. The graduate sociology courses that may be taken, once a student is admitted to the program, are:

- SOCY 502 Contemporary Sociological Theory (may be used to meet the undergraduate major requirement for SOCY 402 Sociological Theory and is a required course in the graduate program)
- SOCY/STAT 508 Introduction to Social Statistics (recommended and may fulfill elective requirement in the undergraduate major)
- SOCY 601 Advanced Methods of Social Research – Prerequisite SOCY/POLI 320 (a required course in the graduate program and may fulfill elective requirement in the undergraduate major)
- SOCY/STAT 608 Statistics for Social Research (a required course in the graduate program and may fulfill elective requirement in the undergraduate major)
- Other SOCY graduate courses, with the approval of the director of graduate studies, may serve as an elective requirement for the M.S. degree and an elective for the undergraduate major.

All accelerated program students must have their schedules approved by the graduate program coordinator prior to registration.

Sociology, minor in

A sociology minor consists of 18 credits including SOCY 101 General Sociology and SOCY 402 Sociological Theory. At least 12 credits must be upper-level (300-400) sociology courses. The remaining three credits may be any sociology, social science or anthropology course.

Urban and Regional Studies, Bachelor of Science (B.S.)

Ivan Suen
Associate Professor and Program Coordinator

The Bachelor of Science in Urban and Regional Studies provides a solid foundation for professional work or advanced study aimed at solving some of the most important challenges and issues facing the U.S. and other world regions, such as urban sprawl, economic marginalization, ethnic and racial conflict and environmental degradation. The program covers a wide range of topics related to these issues, including transportation, housing, land use, environmental management, regional and international development, human-environment interaction, globalization and socioeconomic change. Students can focus on the subject matter of their interest by choosing to concentrate in either urban planning and policy or regional analysis and development; alternatively they may opt for a generalized course of study. Nine core courses and a lab (26 credits total) are required for all majors. These courses provide fundamental background knowledge in an array of disciplines that form the foundations of urban and regional studies, such as urban planning and design, human and physical geography, economics, environmental management, urban and public policy, and geographic information systems. Students complete their remaining 12 credits within one of the two concentrations or through a generalized course of study.

The program helps develop a theoretical and methodological background as well as analytical skills that can be used to address a wide range of issues and problems. Students acquire marketable skills in qualitative and quantitative analysis, computer usage, problem solving and communication — as well as a broad perspective on environment and society — that are essential for many occupations.

Faculty members represent the following disciplines and professions: planning, geography, political science, urban studies, architecture and environmental studies. Additionally, supporting courses in urban and regional studies are taught by faculty members from other departments within the College of Humanities and Sciences and by adjunct professors.

Degree requirements – Bachelor of Science in Urban and Regional Studies

Urban planning and policy concentration
Regional analysis and development concentration
Generalized course of study

Degree requirements – Bachelor of Science in Urban and Regional Studies

The Bachelor of Science in Urban Studies and Geography requires 120 credits, including 40 credits within the major. The program is designed so that students may enter as late as their junior year.

Note: Proof of competency with Excel software is a prerequisite for URSP/GEOG 306, and GEOG 204 (or permission of instructor) is a prerequisite for URSP/ENVS/GEOG 332.

Core courses

Urban foundations course - Choose one of the following three courses:
- URSP 116 Introduction to the City
- URSP 108 Uncovering Richmond
- URSP 120 Urban Issues in Film

GEOG 102 Introduction to Human Geography
GEOG 204 Physical Geography
GEOZ 204 Physical Geography Laboratory
URSP/GEOG 302 Land Use and Infrastructure Planning
URSP/GEOG 306 Economic Geography
URSP/GEOG 313 Research and Field Methods in Urban and Regional Studies
URSP/ENVS/GEOG 332 Environmental Management
URSP 360 Community and Regional Analysis and GIS
URSP 440 Senior Capstone Seminar in Urban and Regional Studies

Students can then choose to pursue one of the following two concentrations or, if following a generalized course of study, take any of the non-core courses, to complete the remaining 12 credits for the major. Courses marked with an asterisk are required for the concentration under which they are listed.

Urban planning and policy concentration

The concentration in urban planning and policy involves an examination of the evolution of urban areas, urban governments and economies, the relationship between urban activities and the natural environment, land use and the built environment, urban culture and social dynamics, and policies and planning strategies for improving urban socioeconomic and environmental conditions. Students have the opportunity to explore and develop plans and policy strategies aimed at revitalizing communities, preventing urban sprawl, fostering environmental sustainability and alleviating poverty.

Students following this concentration complete the two required courses (marked with asterisks) and the remaining six credits from the list below.

*URSP 310 Introduction to Urban and Regional Planning
URSP 541 Urban Public Policy-making Processes
URSP 245 Housing and Community Revitalization
URSP 261 Design of the City
URSP 315 The Evolution of American Cities
URSP 322 Urban Finance
URSP/GEOG/INTL 340 World Cities Outside of North America
URSP 350/INTL 345/FRLG 345 Great Cities of the World
URSP 461 Applied Planning Studio
URSP 517 Historic Preservation in Planning
URSP 525 Site Planning and Graphics
URSP 552 Urban Transportation Systems
URSP 567 The American Suburb

Regional analysis and development concentration

This concentration focuses on the economic, sociopolitical, technological and environmental transformations affecting most nations and regions. In some cases these have given rise to difficult problems and challenges, such as poverty and economic marginalization, resource scarcity, environmental degradation, and ethnic conflict. Such issues are addressed by drawing upon both the natural and social sciences and by utilizing detailed yet holistic analysis of the problems and their root causes. The concentration seeks to engage students in exploring how particular regions can maintain or create favorable economic, social and environmental conditions in light of the rapid transformations that are taking place at multiple scales. Like the discipline of geography to which it is related, the regional analysis and development concentration focuses on the phenomena of place and space and, more specifically, on the biophysical, socioeconomic and cultural characteristics of regions and the relationships among these characteristics. Students examine how and why places and regions differ from one another, how and why they change over time, and how societies interact with the
natural environment. They also explore the impacts of existing and potential policies and programs on regional socioeconomic and environmental conditions.

Students following this concentration complete the two required courses (marked with asterisks) and the remaining six credits from the list below.

*URSP/GEOG 420 Regional Planning and Sustainable Development
*Choose one of the following five courses:
  GEOG/INTL 303 World Regions
  GEOG/INTL 304 World Regions
  GEOG 331 Geography of Latin America and the Caribbean
  GEOG/AFAM/INTL 333 Geography of Africa
  GEOG/INTL 334 Regional Geography of
  GEOG 203 Physical Geography
  GEOZ 203 Physical Geography Laboratory
  GEOG/ANTH 312 History of Human Settlement
  GEOG/ENVS 335 Environmental Geology
  GEOG/ENVS 401 Meteorology and Climatology
  GEOG/ENVS 411 Oceanography
  URSP 502 Global Economic Change and Geography
  URSP 552 Urban Transportation Systems

Other available courses
  GEOG 391 Topics in Geography
  GEOG 492 Independent Study
  GVPA 493 Government and Public Affairs Internship
  URSP 391 Special Topics in Urban Studies
  URSP 397, 398 Independent Study
  URSP 413 Policy Implementation

Generalized course of study
This option is designed for those students who have a broad interest in urban and regional studies. They can tailor this course of study to match not only intellectual interests but anticipated career goals. Students complete the core courses and then select the remaining 12 credits from any of the non-core courses listed above.

Urban and regional studies, minor in

The minor in urban and regional studies requires 18 credits. All students must take the following: any 100-level URSP class; GEOG 102 Introduction to Human Geography; and GEOG 204 Physical Geography. An additional nine credits of electives must be selected from any other upper-level (300- or above) URSP or GEOG courses.

Center for Public Policy

The Center for Public Policy focuses the university’s multidisciplinary efforts in public policy. As a comprehensive, university-wide center, the center has responsibilities in each area of the university’s broader missions: teaching, research and public service. The center houses and administers the Ph.D in Public Policy and Administration.

The center conducts basic and applied research on a number of public policy matters, with special attention to health policy, urban and metropolitan development, and state and local government and politics. And, the center engages in significant service through its training programs, conferences, publications and other contributions to public discourse.

Administration

919 W. Franklin St.
P.O. Box 843061
Richmond, VA 23284-3061
(804) 828-6837
Fax: (804) 828-6838
http://www.vcu.edu/cppweb

Michael D. Pratt
Director, Center for Public Policy

School of Mass Communications

The School of Mass Communications prepares effective and skilled communicators through quality instruction, advising and student services, based on real-world applications. Through research, professional service and scholarship in applied communications, the school advances the knowledge and practice of a multidisciplinary and evolving media environment. The school values truth, ethics, creativity, innovation, collaboration, cultural diversity, shared governance and community engagement.

The school offers a Bachelor of Science in Mass Communications with specialization in one of three sequences: advertising, journalism and public relations. The school also awards the Master of Science in Mass Communications, with concentrations in the areas of advertising, multimedia journalism and strategic public relations. The advertising program is offered through the VCU Brandcenter.

Mass communications courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to mass communications (MASC) courses.

Undergraduate information

Mass Communications Scholars Program

The Mass Communication Scholars Program demands a rigorous course load and a high GPA. It prepares students for professional positions in the communications fields and for competitive post-graduate programs. The program supports the highest standards of excellence in education and is designed to enhance the education achievement of students through a variety of special opportunities, demands and programs.

The Mass Communication Scholars Program is open to undergraduate mass communications majors who have been accepted into the VCU Honors College.

To graduate as Mass Communications Scholars, students must:

- Maintain an overall 3.5 GPA and a 3.5 GPA in the major.
- Maintain good standing in the VCU Honors College.
- Complete 18 credit hours in honors courses or “variants.” At least 15 of these honors credits must be taken in the school. At least three honors credits must be completed each academic year.
- Attend at least four Honors-speakers events or colloquia each academic year for exchange of ideas.
- Complete a capstone, three-credit thesis or project course, MASC 492 Independent Study.
- Complete an approved international component.
• Compile a dossier or portfolio of their work to document their educational career, major, interests and scholarly pursuits. The dossier will include an essay on how the student has become a well-educated individual deserving of Mass Communications Scholars designation.

The School of Mass Communications will offer at least two honors courses or “variants” per year. Variants are courses in which students may receive honors credit while in non-honors courses by meeting additional requirements such as more advanced readings, greater depth in research or project work or additional assignments as deemed appropriate by the instructor (and approved by the Honors College).

The Mass Communications Scholars Program is a departmental honors program linked to the VCU Honors College. Mass communications students will be able to graduate with mass communications honors and with university honors. Mass Communications Scholars will earn a distinctive designation at their graduation ceremony.

Honors courses and courses designated as variants will be listed in the Schedule of Classes for each semester. Students wishing to enter the Mass Communications Scholars Program should contact the program coordinator.

Mass Communications, Bachelor of Science (B.S.)

The School of Mass Communications offers a Bachelor of Science in Mass Communications with specialization in one of three sequences

Degree requirements – Bachelor of Science in Mass Communications

Foundation course work
Advertising sequence
Journalism sequence
Public relations sequence
Collateral requirements

Degree requirements – Bachelor of Science in Mass Communications

Students must earn at least 80 credits in courses outside mass communications. Of those 80 credits, at least 65 must be in the liberal arts and sciences. See the School of Mass Communications for a list of LAS courses. In addition, students must earn a total of 45 credits in courses at the 300-level and above, including upper-level mass communications course work. To graduate from the mass communications program, students must have a cumulative and major GPA of 2.5 and must earn at least a C in their senior-level capstone courses. The mass communications curriculum includes the foundation and specific sequences.

Foundation course work

For public relations or journalism students
MASC 101; MASC 203 with a minimum grade of C; and completion of UNIV 111, UNIV 112, POLI 103, ECON 203 and the College of Humanities and Sciences’ “Math and Statistics (must choose STAT 208)” “Science and Technology” and “Diverse and Global Communities” requirements.

For advertising students
MASC 101; MASC 201; MASC 204 with a minimum grade of C; and completion of UNIV 111, UNIV 112, ECON 203 and the College of Humanities and Sciences’ “Human, Social and Political Behavior,” “Math and Statistics” (must choose STAT 208), “Science and Technology” and “Diverse and Global Communities” requirements.

To enroll in MASC 203 or 204, students must receive departmental permission. Admittance to a sequence in the School of Mass Communications is contingent on meeting the following requirements: an overall GPA of at least 2.5 in all courses and completion of the required mass communications foundation courses. Transfer students will be evaluated on an individual basis but generally will be required to meet the prerequisites for admission to the major sequence during the second semester they are enrolled at VCU.

Certification of these requirements must accompany a formal petition for admission to a sequence. At this time, the student must select a specialization in one of the school’s sequences: advertising, journalism or public relations. In addition, students selecting the advertising sequence must choose either the creative advertising or strategic advertising concentration. Students selecting the journalism sequence must choose either the broadcast journalism or the print journalism concentration.

To enroll in a mass communications course, majors must have earned a minimum grade of C in all courses prerequisite for that course. To graduate from the mass communications program, students must earn a minimum grade of C in their senior-level capstone courses. (Those courses are designated below with an asterisk.)

Students admitted to a sequence must choose one of the following:

Advertising sequence
The advertising sequence prepares students for careers at advertising agencies, marketing departments of corporations or service organizations, and media buying companies. Students choose one of two concentrations: strategic or creative.

All advertising students:
MASC 101 Mass Communications
MASC 201 Curiosity
MASC 204 Story (or MASC 203 Journalism Writing)
MASC 380 History of Advertising
MASC 409 Truth and Honor
MASC 481 Completeness*

Strategic concentration
MASC 398 Awareness
MASC 399 Empathy
MASC 459 Judgment*
MASC 493 Fieldwork/Internship (3 credits)
MASC electives (9 credits)

Creative concentration
MASC 300 Technical Prowess
MASC 392 Perspicuousness
MASC 394 Imagination
MASC 450 Style
MASC 451 Invention*
MASC electives (6 credits)

Journalism sequence
The journalism sequence provides students with the skills and practice necessary for careers in the news media. Students choose one of two concentrations: broadcast or print.

All journalism students:
MASC 101 Mass Communications
MASC 203 Journalism Writing
MASC 303 Reporting for Print and Web
MASC 361 History and Development of Journalism
MASC 363 Introduction to Broadcast Writing
MASC 367 Audio and Video Journalism
MASC 408 Communications Ethics and Law
MASC 493 Fieldwork/Internship (3 credits)

Broadcast concentration
MASC 415 Advanced Video Journalism
MASC 460 Advanced Television Newsgathering
MASC electives (3 credits)

Choose one of the following capstone courses:
MASC 461 The Documentary*
MASC 465 Newscasting*
MASC 475 Capital News Service*
MASC 496 Multimedia Journalism*

Print concentration
MASC 301 Graphics for Journalism
MASC 305 Copy Editing

Choose two of the following capstone courses. (The two courses may not be taken during the same semester without permission of the instructors.)
MASC 403 Advanced Reporting*
MASC 404 Specialized Project Reporting*
MASC 475 Capital News Service*
MASC 496 Multimedia Journalism*

Public relations sequence
The public relations sequence is designed to prepare students for employment in industry, government, nonprofit associations and public relations agencies.

MASC 101 Mass Communications
MASC 203 Journalism Writing
MASC 323 Public Relations
On May 16, 2003, the Board of Visitors of Virginia Commonwealth University approved the creation of the School of World Studies within the College of Humanities and Sciences. The school is a creative, interdisciplinary grouping of subject areas in the humanities and the social sciences that provides its students with the knowledge, skills and experience necessary for success in an increasingly interdependent, globalized 21st century.

Sensitivity to the values, beliefs and structures of other cultures is a necessary characteristic of community and business leaders of the next century. The ability to live and work alongside those who are perceived as different from oneself and to recognize similarities among all humans will become an increasingly essential attribute of an educated citizen.

To achieve its mission, the School of World Studies actively fosters and promotes a wide range of endeavors, including the establishment of interdisciplinary undergraduate and graduate programs with an international focus across the campuses, and develops close ties with such programs as African American studies, womens studies, English, history, life sciences and other units throughout the university. In addition there are collateral requirements such as experiential learning through an approved internship, service-learning course or study-abroad program, the fulfillment of a World Passport, and advanced language skills.

Although the programs currently encompassed by the school are primarily at the undergraduate level, the School of World Studies offers a select number of graduate courses.

### Administration

312 North Shafer Street  
P.O. Box 842021  
Richmond, Virginia 23284-2021  
(804) 827-1111  
Fax: (804) 827-3479

www.worldstudies.vcu.edu

Executive Committee

Christopher Brooks  
Angelina Overvold  
Mark Wood

### Degree programs

The School of World Studies offers baccalaureate degrees in the following fields:

- **Anthropology** – Bachelor of Science
  - **Foreign Language** – Bachelor of Arts
    - French
    - German
    - Spanish

- **International Studies** – Bachelor of Arts (with the L. Douglas Wilder School of Government and Public Affairs)
  - area studies
  - global studies

- **Religious Studies** – Bachelor of Arts

Minors are awarded in these areas:

- African studies
- Anthropology
- Arabic and Middle Eastern studies
- Asian and Chinese studies
- Catholic studies
- European studies
- French
- German
- International social justice studies
- Islamic studies
- Italian studies
- Judaic studies
- Latin American studies
- Mediterranean studies
- Religious studies
- Russian studies
Spanish
World studies

Undergraduate certificates are awarded in these areas:

- International management studies (in conjunction with the School of Business)
- International social justice studies (in conjunction with the School of Social Work)
- Spanish/English translation and interpretation

Information regarding curricula is provided on the respective program pages.

Languages

The School of World Studies offers students significant opportunities to broaden their knowledge of diverse cultures through language study, including:

- Arabic
- Biblical Hebrew
- Chinese
- French (major and minor)
- German (major and minor)
- Hindi
- Italian
- Portuguese
- Russian (minor)
- Spanish (major and minor)
- Zulu

In cases where the appropriate level of instruction is unavailable, faculty advisers will assist the student in identifying language study options at other U.S. institutions or abroad.

Experiential learning and study abroad

World Passport

As part of the School of World Studies’ commitment to learning through engagement, each student within the school is required to complete a World Passport to introduce him or her to a breadth of experience beyond the core curriculum: cultural opportunities, experiential learning, seminars and conferences, international experiences, and multicultural campus activities. Students are required to obtain information about their personal World Passport from the School of World Studies Advising Office. The passport will be kept in the student advising file throughout the duration of study. It will be reviewed and stamped by an SWS adviser prior to graduation, and then given to the student upon completion.

The passports are color-coded for four required categories of activities to be completed by students before graduation from VCU with a degree from the School of World Studies.

- Professional preparation prepares students for careers, graduate school and lifelong learning.
- Crossing boundaries exposes students to international and multicultural interactions and ideas.
- Community engagement enhances the undergraduate experience by greater involvement in the community.
- Experiential learning provides students the opportunity to demonstrate success in applying program content beyond a classroom setting.

The School of World Studies is committed to the premise that learning is best facilitated through engagement with the dynamic complexities and challenges of the world outside the classroom. Both majors and minors in the school are required to participate in experiential learning options. All experiential learning opportunities must receive prior approval from the SWS Advising Office and include internships, service-learning courses, certain noncredit options and study abroad.

Study abroad

Summer study-abroad programs provide students with opportunities for short-term immersion in the language, culture and civilization of the countries they visit. A list of current VCU study abroad opportunities can be found at www.international.vcu.edu/abroad. VCU is a member of the International Student Exchange Program, which offers junior year abroad programs at one of 40 universities worldwide. For more information about study abroad or the World Studies Community Scholars, visit the School of World Studies website at www.worldstudies.vcu.edu.

World Passport completion

The instructions for successful completion of the World Passport requirements, along with a description of each of the color-coded sections, can be found on the World Studies website at www.worldstudies.vcu.edu or in the World Studies Advising Office. Students are responsible for attending appropriate events, securing documentation of attendance and meeting with their adviser to have the passport stamped as points are earned for each category. The potential events can be determined by utilizing the category descriptions noted in the passport or by visiting the SWS Calendar at www.worldstudies.vcu.edu. Evaluation of the passport is on a pass/fail basis. Should a student lose his or her passport, he or she would be required to re-create attendance at events in essay form or complete the requirement in some other way determined by the adviser or program coordinator.

World Studies Community Scholars

Outstanding School of World Studies majors can be considered for special recognition as World Studies Community Scholars through faculty recommendation.

For more information, contact the SWS Advising Office: SWSAdvising@vcu.edu.

School of World Studies courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

The World School offers courses in the following areas:

- Use this link to see anthropology (ANTH) courses.
- Use this link to see foreign literature in English translation (FLET) courses.
- Follow these links to geography (GEOG) courses or the (GEOZ) laboratories.
- Use this link to see international studies (INTL) courses.
- Use this link to see religious studies (RELS) courses.
- Use this link to see world studies (WRLD) courses.

Foreign language courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Students planning to take a foreign language course at VCU must take the placement test in order to determine proper course selection. Specific information about the placement test is available on the School of World Studies website at www.has.vcu.edu/wld/placement.

Students who wish to complete a language through the intermediate level or higher are required to consecutively complete 101, 102 and 201 or the equivalent. Students may then choose either 202 or 205 to complete the intermediate level.

The School of World Studies offers courses in the following languages:

- Use this link to see Arabic (ARBC) courses.
- Use this link to see Chinese (CHIN) courses.
- Use this link to see foreign languages (FRLG) courses.
- Use this link to see French (FREN) courses.
- Use this link to see German (GRMN) courses.
- Use this link to see Italian (ITAL) courses.
- Use this link to see Latin (LATN) courses.
- Use this link to see Portuguese (PORT) courses.
- Use this link to see Russian (RUSS) courses.
- Use this link to see Spanish (SPAN) courses.
The Bachelor of Science in Anthropology requires a minimum of 120 credits, with at least 36 of those credits in anthropology, 25 of which must be in upper-level (300, 400 or 500) courses. However, a student with a particular anthropological interest that can be best served by courses without the ANTH prefix may suggest a coherent selection of up to 11 credits from such classes to be counted toward the major. A plan for such selection must be presented to and approved by the program coordinator in the student’s junior year or, for those students entering the program at the junior level, at a time stipulated by the program coordinator. A maximum of 12 credits from internships and/or independent studies may be counted toward the degree requirements. For graduation, students must maintain at least a 2.25 GPA in the major courses.

Students must take the following core courses and attain a “C” grade or higher in each course:

**Core requirements**

- ANTH/INTL 103 Introduction to Anthropology
- ANTH105/INTL 104 Introduction to Archaeology
- ANTH 301/BIOL 341 Human Evolution
- ANTH 302 Archaeological Theory or ANTH 303 Archaeological Methods and Research Design
- ANTH 448/ENGL 455/FRLG 448/LING 455 Language, Culture and Cognition or ANTH/ENGL/LING 390 Introduction to Linguistics
- ANTH 454 Anthropological Theory and Practice
- ANTH 499 Senior Seminar

**Collateral requirements**

- Take one introductory course in geography, history, international studies or sociology (not included in the 36 credits for the major).
- Fulfill an experiential learning requirement through an approved internship, service-learning course or study-abroad program.
- Demonstrate competency in one language through the advanced (301) level or in two languages through the intermediate (202/205) level.

Anthropology majors are strongly encouraged to complete a minor, preferably one offered in World Studies. Students should refer to the listing in the general description of the School of World Studies.

**Honors in anthropology**

- Majors in the anthropology program may earn a Bachelor of Science degree with honors in anthropology. Participation in honors thesis research is available to outstanding senior majors and involves the preparation of a senior thesis during the last two semesters of the baccalaureate degree program.
- In order to participate in the program, students must meet program entrance requirements, identify a project mentor and receive approval for a project proposal. Honors will be awarded following acceptance of the thesis by the Honors Thesis Committee (HTC). The committee will consist of, at a minimum, the project mentor, one other member of the anthropology faculty and one faculty member from outside of the anthropology program.
- The project may involve any recognized anthropological topic, theory and/or method that promises to enhance the student’s disciplinary perspective, skills and creativity. The project may involve an extension of work initiated in a course, an entirely new project or a collaborative project with the faculty mentor. If the project is an extension of work initiated in a course or developed collaboratively with the mentor, independent, separate, substantial development of the topic in the thesis should be evident in the final product. The thesis should reflect work of high quality for a senior-level course.
- Students majoring in anthropology are eligible to participate in the departmental honors program if they have maintained at least a 3.0 overall GPA and at least a 3.3 GPA in the major. Application materials consist of transcripts documenting the required GPAs, a five-to-seven page proposal (including a history and description of the proposed project, an annotated bibliography of relevant sources, a work plan, and a schedule for completion of the project) and a letter of endorsement from the faculty member who has agreed to act as project mentor. Applications must be made and project approval received no later than the first two weeks of classes in the semester in which the project will commence. A departmental committee will review the application materials, meet with the candidate to discuss the project proposal as needed and render an admission decision. Once admitted, program participants will enroll in ANTH 497. The course may be included in the required hours for the major.
- Students may earn a Bachelor of Science degree with honors in anthropology. Participation in honors thesis research is available to outstanding senior majors and involves the preparation of a senior thesis during the last two semesters of the baccalaureate degree program.
- Students majoring in anthropology are eligible to participate in the departmental honors program if they have maintained at least a 3.0 overall GPA and at least a 3.3 GPA in the major. Application materials consist of transcripts documenting the required GPAs, a five-to-seven page proposal (including a history and description of the proposed project, an annotated bibliography of relevant sources, a work plan, and a schedule for completion of the project) and a letter of endorsement from the faculty member who has agreed to act as project mentor. Applications must be made and project approval received no later than the first two weeks of classes in the semester in which the project will commence. A departmental committee will review the application materials, meet with the candidate to discuss the project proposal as needed and render an admission decision. Once admitted, program participants will enroll in ANTH 497. The course may be included in the required hours for the major.
- Students must complete six credit hours (over two sequential semesters in their senior year) in ANTH 497 and ANTH 498. The student’s work will be evaluated by the project mentor and a departmental committee at the end of the first semester (ANTH 497) and a grade will be assigned. If allowed to continue, the student will enroll in ANTH 498 the subsequent semester. At the completion of ANTH 498, the completed senior honors thesis will be submitted to the HTC following its acceptance by the faculty mentor and confirmation that the candidate has maintained the requisite GPAs.
- Upon submission of the thesis, the student will make an oral presentation (to be made no later than two weeks before the end of classes) to the HTC and other
faculty as deemed appropriate, summarizing the research procedures and findings. The HTC will then evaluate the thesis for the award of honors. In order to receive honors, the thesis must be evaluated as deserving of a grade of “A.” Whether or not honors are awarded, a final grade will be submitted for ANTH 498. The awarding of honors for the thesis will earn an Honors Certificate from the department and notation of the student’s standing as an honors graduate on the final grade transcript. Students must submit a final copy of the thesis to both the department and the VCU Libraries no later than the last day of classes.

**Undergraduate topics courses**

Topics courses in anthropology, offered as ANTH 391, are an integral part of the program and provide a rare opportunity for the advanced student. Generally these courses are restricted to a small number of students who share specialized interests in a topic that is either too advanced or too limited in its general appeal to justify its inclusion as a standard offering. At most only one such course is offered each semester, and ANTH 391 can be repeated for up to a maximum of 18 credits as long as there is no duplication of the topics.

**Independent study**

ANTH 492 Independent Study is designed for advanced students capable of doing independent work on selected topics under the directions of specific faculty. Students may earn a total maximum of 12 credits in departmental independent study courses and internship credits, but may not enroll for more than six credits per semester in independent studies. Only majors in anthropology or related fields can enroll in these courses. All students entering these courses must have completed a minimum of 12 credits in anthropology and have an anthropology GPA of 3.0 or more.

**Internship**

ANTH 493 Internship is designed for the advanced student to gain workplace experience in a local, national or international business or agency offering opportunities in anthropological field methods or research. Applications must be approved by the School of World Studies internship coordinator. Each student must work 40 clock hours per credit hour in the organization. Students may earn up to a total of six credit hours in internship as anthropology majors and a total of three credit hours of internship as anthropology minors. All students enrolling in an internship must have completed nine credits in anthropology courses at the 300 level or above and be in good academic standing with a minimum major GPA of 2.25.

**Anthropology, minor in**

An anthropology minor shall consist of 18 credits in anthropology, including ANTH/INTL 103 Introduction to Anthropology. The remaining 15 credits must be taken from upper-level (300, 400 or 500) anthropology courses.

**Arabic and Middle Eastern studies, minor in**

The Arabic and Middle Eastern Studies minor consists of 21 credits. A minimum of 12 credits must be earned at the upper (300- or 400-) level.

Students must complete a minimum of three credits of Arabic at the advanced level (300 or above). The prerequisite course of ARBC 202 or ARBC 205 may be counted toward the total number of credits for the minor. Native speakers of Arabic may not use intermediate credit in the language to count toward the minor.

**Note:** Language Placement Test results cannot substitute for completion of coursework.

To complete the remaining credits for the minor, students choose courses from the following list. No more than six credits can be earned within the same discipline:

- ANTH/INTL 455 Anthropology of Development and Globalization*
- ECON/INTL 329 International Economics*
- FLET/INTL 391 Topics in Foreign Literature in English Translation*
- FREN/INTL 450 Francophone Literatures and Cultures*
- FREN 491 Topics in French*
- GEOG/INTL 304 World Regions
- HIST 301/RELS 315 The Ancient Near East
- HIST 302/RELS 316 The Ancient Near East
- HIST 328 Modern Middle East
- HIST 332 History in Film*
- HIST 383 Ancient Egypt
- HIST 499 Directed Study
- INTL 201 Introduction to the Middle East and North Africa
- POLI/INTL 351 Governments and Politics of the Middle East
- POLI/INTL 361 Issues in World Politics*
- POLI 367/CJJS 367/HSEP 301 Terrorism
- RELS 301 Introduction to the Hebrew Bible
- RELS 302 Introduction to the New Testament
- RELS 305 Hebrew Prophets
- RELS/INTL 306 Introduction to Judaism
- RELS 310 Mediterranean Religions
- RELS 312 Religions of the World (Western)
- RELS/INTL 317 Islam
- RELS 318/HIST 325 History of the Jewish People
- RELS 319/HIST 326 History of the Jewish People
- RELS/HIST 327 History of Christianity
- RELS 340/INTL 341 Global Ethics and the World’s Religions*
- RELS/WMNS 371 Islam and Women
- RELS 407 Modern Jewish Thought
- RELS/INTL 409 Modern Islamic Thought and Global Trends
- RELS 491 Topics in Religious Studies*
- URSP 350/FRLG 345/INTL 345 Great Cities of the World*
- WMNS 366/POLI 366/INTL 368 Women and Global Politics
- WRLD 220 Human Rights and Literature*
- WRLD 391 Topics in World Languages and Cultures*
- WRLD 491 Topics in World Languages and Cultures*
- Courses taken through an approved study abroad program in an appropriate location (must be preapproved through the SWS Advising Office)

*When appropriate: Always check first with the SWS Advising Office before enrolling in these courses.

**Asian and Chinese studies, minor in**

The Asian and Chinese studies minor consists of 21 credits. A minimum of 12 credits must be earned at the upper (300- or 400-) level.

Students must complete a minimum of three credits of Chinese at the advanced level (300 or above). The prerequisite course of CHIN 202 may be counted toward the total number of credits for the minor. Native speakers of Chinese may not use intermediate credit in the language to count toward the minor.

**Note:** Language Placement Test results cannot substitute for completion of coursework.

Students choose from the following courses to complete the remaining credits of the minor. No more than six credits can be earned within the same discipline.

**Required:** RELS 311 Religions of the World (3 credits)

**Minimum of 3 credits from the following:**

- HIST 107 Survey of East Asian Civilizations
- HIST 108 Survey of East Asian Civilizations
- HIST 201 The Art of Historical Detection*
- HIST 332 History in Film*
- HIST 379 The History of Modern Japan
- HIST 381 The History of Early Modern China, 1500 to 1800
- HIST 382 The History of Modern China, 1800 to the Present
- HIST 391 Topics in History*
- POLI/INTL 355 Asian Government and Politics
- POLI/INTL 364 Vietnam
- POLI/INTL 452 Seminar in the Politics of Developing Areas

**Minimum of 3 credits from the following:**

- ARTH 245 Survey of Asian Art
- ARTH 445 The Art of India
- ARTH 447 The Art of Southeast Asia
- ARTH 449 Studies of Asian Art
- FLET/INTL 391 Topics in Foreign Literature in English Translation*
- GEOG/INTL 304 World Regions
- RELS 320 Taoism
- RELS/PHIL 322 Tibetan Buddhism
- RELS/PHIL 342 Buddhist Reasoning and Debate
- RELS 368 Asian Religions and Asian Medicine
- RELS/PHIL/INTL 410 Chinese Tradition in Philosophy
- RELS/PHIL/INTL 412 Zen Buddhism
- RELS 442 Seminar in Hinduism
WRLD/INTL 203 Cultural Texts and Contexts*
WRLD 220 Human Rights and Literature*
WRLD 391 Topics in World Languages and Cultures*
WRLD 491 Topics in World Languages and Cultures*
Courses taken through an accredited study abroad program in an appropriate location (must be preapproved through the SWS Advising Office).

*When appropriate: Always check first with the SWS Advising Office before enrolling in these courses.

**Catholic studies, minor in**

A minor in Catholic Studies consists of 18 credits including the following:

REL 280 Introduction to Catholic Studies
REL 380 Contemporary Catholic Thought
Two religious studies topic courses (RELS 491) designated “Catholic Studies”

At least two further courses from among the following:

HST 307/RELS 308 The High Middle Ages
HST/RELS 309 The Reformation
HST/RELS 327 History of Christianity
PHIL/REL 430 Philosophy of Religion
REL 302 Introduction to the New Testament
REL 334 Religion in Contemporary America
REL 492 an approved “Catholic Studies” Independent Study
SOCY/REL 360 Sociology of Religion

**European studies, minor in**

The European studies minor consists of 18 credits. A minimum of 12 credits must be earned at the upper (300- or 400-) level. No more than six credits can be earned within the same discipline.

Students must complete a minimum of three credits of geographically pertinent foreign language course work at the advanced level (300 or above). Geographically pertinent foreign languages not taught at VCU will be considered on a case-by-case basis through the School of World Advising Office.

Note: Language Placement Test results cannot substitute for completion of course work.

Minimum of 3 credits from the following:

HST 101, 102 Survey of European History
HST 306 The Early Middle Ages
HST 307/RELS 308 The High Middle Ages
HST 308 Europe in Renaissance
HST/RELS 309 The Reformation
HST 310 Europe in Absolutism and Enlightenment, 1648-1815
HST 311 Zenith of European Power, 1815-1914
HST 312 The Age of Total War: Europe, 1914-1945
HST 313 Post-War Europe, 1945 to Present
HST 315, 316 History of France
HST 317, 318 History of Germany
HST 319, 320 History of England
HST 321, 322 History of Russia
HST 323 History of Spain and Portugal
HST 324 The Holocaust
HST 329, 330 European Social History
HST 331 Nazi Germany
HST 334 Comparative History of Revolutions
HST 336 Modern European Intellectual History
HST 337 The Origins of Modernism 1880-1930
HST 338 History of Socialism
HST 339, 340/WMNS 339, 340 History of Women in Europe
Minimum of 3 credits from the following:

ANTH/INTL 455 Anthropology of Development and Globalization*
INTL 490 Seminar in International Issues*
INTL 491 Topics in International Studies*
MKTG/INTL 320 International Marketing
POLI/INTL 352 European Governments and Politics
POLI/INTL 354 Russian and Post-Soviet Politics
RELS 310 Mediterranean Religions

SOCY/INTL 328 Russian Society in Transition
URSP 350/FRLG 345/INTL 345 Great Cities of the World*
WRLD/INTL 203 Cultural Texts and Contexts*
WRLD 391 Topics in World Languages and Cultures*
WRLD 491 Topics in World Languages and Cultures*

*When appropriate: Always check first with the SWS Advising Office before enrolling in these courses.

Minimum of 3 credits from the following:

FREN 320 French Civilization and Culture I
FREN 321 French Civilization and Culture II
FREN 330, 331 Survey of Literature
FREN 420 French Regional Culture
FREN 421 French Contemporary Culture
FREN 425 French Media
FREN/INTL 450 Francophone Literatures and Cultures*
GRMN 320 German Civilization I
GRMN 321 German Civilization II
GRMN 330, 331 Survey of Literature
GRMN 420 The Turn of the Century
GRMN 423 Folk/Popular Culture
GRMN 424 Culture and Society
INTL/FLET 391 Topics in Foreign Literature in English Translation*
ITAL 320 Italian Cinema
ITAL 330 Themes in Italian Literature
ITAL 391 Topics in Italian
RUSS 311 Conversation and Media
RUSS 330 Literature and Culture
RUSS 422 Russian Film
RUSS 491 Topics in Russian
SPAN 320 Civilization of Spain I
SPAN 330 Survey of Spanish Literature
SPAN 420 Civilization of Spain II
WRLD 230 Introduction to World Cinema

Courses taken through an approved study abroad program in an appropriate location (must be pre-approved through the SWS Advising Office).

To complete the remaining credits for the minor, students choose courses from the above categories, or students interested in art history may also choose three credits from the following category to complete minor requirements:

ARTH 310 Medieval Art and Architecture
ARTH 315 Renaissance Art and Architecture
ARTH 316 Northern Renaissance Art and Architecture
ARTH 320 Baroque and Rococo Art and Architecture
ARTH 325 19th-century Art and Architecture in Europe
ARTH 415 Early Italian Renaissance Art and Architecture
ARTH 417 The High Renaissance
ARTH 420, 421 The Baroque in Northern Europe; The Baroque in Southern Europe
ARTH 425, 426 Neoclassicism, Romanticism, Realism and Impressionism Through Fin-de-Siecle

**Foreign Language, Bachelor of Arts (B.A.)**

The foreign language program offers a varied interdisciplinary humanities curriculum, global in scope and designed to increase students’ knowledge about the cultures and traditions, languages, literature and media, history, values, concerns, and aspirations of peoples in different countries and regions of the world. The goal of the program is ultimately also to both broaden students’ comparative intercultural perspectives and develop their cross-cultural communication abilities. Students have the option to pursue a focus or even combination of concentrations in foreign language(s), area studies and/or global issues (in either cinema and/or social justice), depending upon their interests and career plans. Within each chosen concentration or minor, the range of offerings allows for flexibility in configuring each individual’s course of study, which may be organized in a manner that best suits a student’s particular needs.

The Bachelor of Arts in Foreign Language will qualify students to pursue any of a number of career paths, including international communications, business and marketing, aid and development, journalism, or education; government foreign service, international affairs, immigration service or the Peace Corps; nongovernmental organizations involved in development, relief programs, immigration or human rights advocacy; or public relations in a multicultural environment. Graduates of our program will also find opportunities in teaching at
To complete the concentration, students select nine credits of course work in
Two courses (six credits) of 300-level electives:
- SWS World Passport
- GRMN 305 German Conversation
- WRLD 302 Communicating Across Cultures
- GRMN 300 Composition and Conversation
- WRLD 490 Seminar in World Cultures and Languages
- SPAN 330 Survey of Spanish Literature
- SPAN 495 Spanish Portfolio Seminar Exemptions are made on a case-by-
30-31 credits of foreign language course work at the advanced (300 or
- SPAN 300, 301 Advanced Grammar and Writing
- FREN 305 French Conversation or
- FREN 307 French Conversation and Film
- FREN 320 French Civilization and Culture I
- FREN 321 French Civilization and Culture II
- FREN 330, 331 Survey of Literature

• To complete the concentration, students select nine hours of course work at
the 400 level (or 500 level, when appropriate). Students must have completed
a minimum of three courses (nine credits) of FREN at the 300 level prior to
enrolling in a 400-level FREN course.

German

Bachelor of Arts in Foreign Language with a
concentration in German
Robert Godwin-Jones
Professor and Program Coordinator
worldstudies.vcu.edu/german

Concentration requirements (30 credits)
- GRMN 300 Composition and Conversation
- GRMN 301 Grammar and Writing
- GRMN 305 German Conversation or GRMN 307 German Conversation and
Film or GRMN 311 German Through the Media
- GRMN 320 German Civilization I
- GRMN 321 German Civilization II
- GRMN 330, 331 Survey of Literature

• To complete the concentration, students select nine credits of course work in
German at the advanced level (300 level or above); of these a minimum of
six credits must be earned in 400-level GRMN courses. In order to take a
400- or 500-level course in German, students must have successfully
completed three courses (nine credits) at the 300 level.

Spanish

Bachelor of Arts in Foreign Language with a
concentration in Spanish
Eugenia Muñoz
Associate Professor and Program Coordinator, Spanish
worldstudies.vcu.edu/spanish

Concentration requirements (31 credits)
- SPAN 300, 301 Advanced Grammar and Writing
- SPAN 305 Spanish Conversation or
- SPAN 307 Spanish Conversation and Film or
- SPAN 311 Spanish Through the Media (advanced conversation course)*
- SPAN 320 Civilization of Spain or SPAN 321 Latin American Civilization I
(civilization course)
- SPAN 330 Survey of Spanish Literature or SPAN/INTL 331 Survey of Latin
American Literature (survey of literature course)
- Two courses (six credits) of 300-level electives:
  - SPAN 320 Civilization of Spain, SPAN 321 Latin American Civilization I,
  - SPAN 322 Hispanic Immigrants in the U.S., SPAN 330 Survey of Spanish
Literature, SPAN/INTL 331 Survey of Latin American Literature and SPAN
332 Latino Writers in the U.S.
- Following successful completion of at least three courses (nine credits) of
Spanish at the 300-level, students select three additional courses (at least
nine credits) of Spanish at the 400- or 500-level**. Of the three 400- or
500-level SPAN elective courses, all majors must take at least two of the
courses (in literature, civilization or cinema) at VCU.
- SPAN 495 Spanish Portfolio Seminar Exemptions are made on a case-by-
case basis.

* Among these three advanced conversation courses, students can take only one of the three to meet core major and minor requirements. These courses cannot be
 taken by native speakers of Spanish, non-natives raised in a Spanish-speaking
country or near-native speakers. However, under the consideration of the Spanish
coordinator and class instructor, SPAN 307 and SPAN 311 may be taken by
Spanish-speaking students raised in the U.S. who haven’t had enough practice of
academic discourse in Spanish.
** Only three credits can be selected from the following courses to fulfill Spanish major requirements: SPAN 400 Spanish Translation
SPAN/LING 401 Comparative Structures
SPAN/LING 402 Language Issues in the Spanish-speaking World
SPAN 403 History of the Spanish Language
SPAN 404 Spanish Interpretation
SPAN 414 Commercial Spanish
SPAN 491 Topics in Spanish (if topic is Translation II or Interpretation II)
SPAN 494 Spanish Interpretation and Translation Internship
SPAN 533 Spanish for the Professions

### French, minor in

A minor in French requires at least 18 credits in the chosen language, none of which may be earned at the 100 level. Only six credits may be earned by completing 201, 202 or 205. At least 12 credits must be taken at the 300 level or above. Note: Language Placement Test results cannot substitute for completion of course work. Foreign language minors must take at least two upper-level courses at VCU in the chosen language area.

### German, minor in

A minor in German requires at least 18 credits in the chosen language, none of which may be earned at the 100 level. Only six credits may be earned by completing 201, 202 or 205. At least 12 credits must be taken at the 300 level or above. Note: Language Placement Test results cannot substitute for completion of course work. Foreign language minors must take at least two upper-level courses at VCU in the chosen language area.

### International Management Studies, Certificate in
(Undergraduate certificate)

The certificate program in international management studies is an interdisciplinary program offered by the Department of Management in the School of Business and the School of World Studies in the College of Humanities and Sciences. The certificate program combines international management, foreign languages and European studies into a unique program intended to equip students for careers in international business. Students concentrating in liberal arts or business programs, as well as other majors, are encouraged to apply.

Certification through this program requires 33 to 36 hours of approved credits from the list of courses given below. Students may enroll in this program and take courses while enrolled in another undergraduate program at the university, but must choose the same country track for European studies and foreign language courses.

For more information, contact Dr. Charles M. Byles of the Department of Management at (804) 827-1225 or cmbyles@vcu.edu, or Dr. Patricia Cummins of the School of World Studies at (804) 827-0958 or pcummins@vcu.edu, or visit the program’s website: www.cim.bus.vcu.edu.

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<thead>
<tr>
<th>Course requirements</th>
<th>Credits</th>
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<tbody>
<tr>
<td>European studies</td>
<td>9</td>
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<td>Select three courses from the following list. At least one course must be specific to one of the following country tracks: France, Germany or Spain.</td>
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<tr>
<td>EUCU 307 Aspects of German Culture</td>
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<td>FREN 420 French Regional Culture</td>
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<td>FREN 421 French Contemporary Culture</td>
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<td>GEOG 334 Regional Geography of __________</td>
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<td>GRMN 421 The Postwar German Scene</td>
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<td>HIST 102 Survey of European History</td>
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<td>HIST 313 Post-war Europe, 1945 to the Present</td>
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<td>HIST 316 History of France</td>
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<td>HIST 318 History of Germany</td>
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<td>HIST 323 History of Spain and Portugal</td>
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<td>HIST 330 European Social History</td>
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<td>POLI/INTL 352 European Governments and Politics</td>
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<td>SPAN 420 Civilization of Spain II</td>
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<th>Foreign languages</th>
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Select one of the following language tracks:
- French
  - FREN 300 Advanced Grammar and Writing
  - FREN 321 French Civilization and Culture II
  - FREN 440 Commercial French
- German
  - GRMN 301 Grammar and Writing
  - GRMN 314 Commercial German
  - GRMN 317 Advanced Grammar and Writing
  - GRMN 321 German Civilization II
- Spanish
  - SPAN 300 Advanced Grammar and Writing
  - SPAN 320 Civilization of Spain I
  - SPAN 414 Commercial Spanish

### International Management

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<tr>
<th>Credits</th>
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<tr>
<td>9</td>
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<td>MGMT 319 Organizational Behavior</td>
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<td>MGMT 329/INTL 327 Introduction to Intercultural Communication</td>
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<td>MGMT/INTL 418 International Management</td>
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### Experiential learning

3

The following courses are ways to apply program content to international management settings. Choose any one.

- INTL 493 International Studies Internship
- MGMT/INTL 491 Topics in Management: The European Union (Study Abroad)

Approved service-learning course (SPAN/LING 402 Language Issues in the Spanish-speaking World, FREN 300 Advanced Grammar and Writing, RELS 340/INTL 341 Global Ethics and the World’s Religions or other approved courses).

### Language/cultural immersion experience

0-3

Students must complete an approved language/cultural immersion experience by which they demonstrate the successful application of foreign language, cross-cultural and management skills. This demonstration can be achieved through an approved study abroad program, such as MGMT/INTL 491 Topics in Management: The European Union, an overseas internship, a service-learning course or previous life experience.

### Core course in international management

3

Students must complete the following integrative course, which should be taken toward the end of the program.

- MGMT/INTL 419 Doing Business in Europe

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<th>Total</th>
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<td>33-36</td>
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### International Social Justice Studies, Certificate in
(Undergraduate certificate)

The Certificate in International Social Justice Studies is an interdisciplinary program offered by the School of World Studies and the School of Social Work. The certificate program combines international social justice, foreign languages and area studies into a unique curriculum intended to equip students for careers in a variety of fields both in the United States and abroad. Students concentrating in liberal arts or social work as well as other majors are encouraged to apply.

Certification through this program requires 30 hours of credits from the list of courses below.

### Curriculum requirements

6 credits: International studies. Students take two of the three courses within one of the following tracks:

#### Former Soviet Union

- HIST 321, 322 History of Russia
- INTL/SOCY 328 Russian Society in Transition
- INTL/POLI 354 Russian and Post-Soviet Politics
Students choose from the following courses to complete the minor:

A minimum of 3 credits from the following courses:
- WRLD 210 International Social Justice Studies
- WRLD 220 Human Rights and Literature

A minimum of 3 credits from the following courses:
- RELS 450/INTL 449 Religion, Globalization and Social Justice
- RELS/AFAM/INTL 451 Religion, Racism and Social Justice
- RELS/WMNS/INTL 453 Western Religions, Women and Social Justice
- RELS 455/INTL 456 Catholic Ethics and Social Justice

To complete the minor, students choose three different 3-credit courses, one from at least three of the following interest areas:
- History, gender, race and religion
  - AFAM/SOCY/WMNS 305 African American Family in Social Context
  - AFAM/ANTH/INTL/WMNS 309 Global Women’s Health
  - ANTH/AFAM/INTL 200 Introduction to African Societies
  - ANTH/AFAM/INTL 420 Women of Africa

- World cinema
  - FLET/INTL 391 Topics in Foreign Literature in English Translation
  - HIST/WMNS 341 American Women’s History
  - HIST/AFAM/WMNS 390 Africa and the Americas: Slavery, Gender and Race
  - MASC/WRLD 359 International Media Coverage: The Middle East
  - ANTH/AFAM/INTL 350 Government and Politics of Africa

- Literature
  - AFAM 365/ENGL 365/INTL 367 Caribbean Literature
  - AFAM 365/ENGL 365/INTL 367 Caribbean Literature
  - GRMN 422 Russian Film

- Politics and globalization
  - ANTH/AFAM 302 Politics of the Civil Rights Movement
  - ANTH/INTL 349 Rethinking a Continent: Latin America
  - ANTH/INTL 350 Rethinking a Continent: Europe
  - ANTH/INTL 455 Anthropology of Development and Globalization

- Language/cultural immersion experience
  - Prior to completing all of the certificate requirements students must also demonstrate successful utilization of their language, cross-cultural, social work and social justice knowledge and skills in an approved language/cultural immersion context. This can be accomplished through study abroad program, internship, service-learning course or life/work experience that has been approved by the student’s academic adviser.

**International social justice studies, minor in**

The international social justice studies minor consists of 18 credits. A minimum of 12 credits must be earned at the upper (300- or 400-) level. No more than six credits can be earned within the same discipline.

Students must complete a minimum of three credits of foreign language course work at the advanced level (300 or above).

**Note:** Language Placement Test results cannot substitute for completion of course work.

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**Spanish-speaking world**

- HIST 109, 110 Survey of Latin American History
- ANTH/INTL 349 Rethinking a Continent: Latin America
- INTL/POLI 353 Latin American Governments and Politics

**9 credits: Languages. Students select three courses within one of the following language tracks:**

**Russian**

- RUSS 201 Intermediate Russian
- RUSS 202 Intermediate Russian Readings
- RUSS 311 Conversation and Media
- RUSS 330 Literature and Culture: ____
- RUSS 422 Russian Film
- RUSS 491 Topics in Russian

**Spanish**

- SPAN 201 Intermediate Spanish
- SPAN 202 Intermediate Spanish Readings
- SPAN 205 Intermediate Spanish Conversation
- SPAN 300, 301 Advanced Grammar and Writing
- SPAN 305 Spanish Conversation
- SPAN 307 Spanish Conversation and Film
- SPAN 311 Spanish Through the Media
- SPAN 320 Civilization of Spain I or 321 Latin American Civilization I
- SPAN 330 Survey of Spanish Literature
- SPAN 331/INTL 331 Survey of Latin American Literature
- SPAN 400 Spanish Translation
- SPAN 401/LING 401 Comparative Structures

**9 credits: International social justice.**

- INTL 341/RELS 340 Global Ethics and the World’s Religions
- SLWK 311 Social Work and Oppressed Groups
- WRLD 210 Introduction to International Social Justice Studies

**3 credits: Cross-cultural communication. Students select one of the following courses:**

- ENGL/INTL 454/ANTH 450 Cross-cultural Communication
- INTL 327/MGMT 329 Introduction to Intercultural Communication
- SLWK 230 Communication in the Helping Process

**3 credits: Experiential learning. Students select one of the following ways in which to apply program content to international social justice settings:**

- INTL 493 International Studies Internship
- Approved study abroad program
- Approved service-learning course

**Language/cultural immersion experience.** Prior to completing all of the certificate requirements students must also demonstrate successful utilization of their language, cross-cultural, social work and social justice knowledge and skills in an approved language/cultural immersion context. This can be accomplished through study abroad program, internship, service-learning course or life/work experience that has been approved by the student’s academic adviser.

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**International Social Justice Studies, Bachelor of Arts (B.A.)**

Lynn Nelson
Professor and Program Coordinator in the Wilder School
**General international studies major**

The following three courses (nine credits) are required:

1. INTL 101 Human Societies and Globalization (if not used as a core requirement) or INTL/POLI 105 International Relations (if not used as a core requirement)
2. INTL/POLI 330 Global Societies: Trends and Issues
3. INTL/POLI 362 International Organizations and Institutions

In consultation with their advisers, students will be required to complete 12 additional credits in international studies that comprise a coherent set of courses aimed at deepening knowledge in a particular area. Students interested in completing these credits with a social science emphasis should consult with advisers in the Wilder School, while those interested in completing these credits with a humanities emphasis should consult with advisers in the World School.

**Area studies concentrations**

See the program page for the **B.A. in International Studies** for a full description of degree requirements.

Area studies students must complete foreign language study of the region through the advanced level (300, 305, 320 or 321) and an approved language and cultural immersion experience in that region.

**European studies**

The following three courses (nine credits) are required:

1. HIST 101 Survey of European History
2. HIST 336 Modern European Intellectual History
3. INTL/POLI 352 European Governments and Politics

Students are required to complete four courses (12 credits) from Concentration List J as approved by the students’ advisers. (See [www.has.vcu.edu/wld/academics/minors/area_studies/listj.html](http://www.has.vcu.edu/wld/academics/minors/area_studies/listj.html) for list.)

**Latin American studies**

The following three courses (nine credits) are required:

1. HIST 109 or 110 Survey of Latin American History
2. INTL/ANTH 349 Rethinking a Continent: Latin America
3. SPAN 321 Latin American Civilization I or INTL/POLI 353 Latin American Governments and Politics

Students are required to complete four courses (12 credits) from Concentration List G as approved by the students’ advisers. (See [www.has.vcu.edu/wld/academics/minors/area_studies/listg.html](http://www.has.vcu.edu/wld/academics/minors/area_studies/listg.html) for list.)

**Global studies concentrations**

See the program page for the **B.A. in International Studies** for a full description of degree requirements.

Students may enroll in the international studies program in either the School of World Studies or the L. Douglas Wilder School of Government and Public Affairs. Those who choose to follow a global studies concentration may choose from the emphasis areas below.

**School of World Studies**

- International social justice studies
- World cinema

**L. Douglas Wilder School of Government and Public Affairs**

- Comparative studies
- International institutions and globalization

**Global studies concentrations in the World School**

**International social justice studies**

The following three courses (nine credits) are required:

1. RELS 340/INTL 341 Global Ethics and the World’s Religions
2. WRLD 210 International Social Justice Studies
3. WRLD 220 Human Rights and Literature

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**Degree requirements – Bachelor of Arts in International Studies**

To earn a Bachelor of Arts in International Studies, students must complete 120 course credits, at least 31 of which must be in the major, with a minimum GPA of 2.25. Students must take at least 21 credits in upper-level (300 or 400) INTL courses. The focus should be interdisciplinary, with no more than half of major course credits beyond the INTL core coming from any one traditional discipline (e.g., ANTH, POLI or SOCY).

Students should work with their advisers to establish a plan for a minor that will broaden their international studies perspectives. International studies majors are encouraged to complete the course requirements for a minor in one of the following fields: African studies, Arabic and Middle Eastern studies, anthropology, Asian and Chinese studies, economics, business (general business minor), French, geography, German, history, Italian studies, Mediterranean studies, political science, religious studies, Russian studies, sociology, Spanish or urban and regional studies. Students also may want to consider a second major. Advisers will work with students to explore the benefits of a double major and a minor.

All majors are required to complete the following core courses (10 credits):

- INTL 101 Human Societies and Globalization or INTL/POLI 105 International Relations (three credits)
- INTL 490 Seminar in International Issues (three credits)
- INTL 493 International Studies Internship or INTL 398 Directed Study Abroad (or other approved study-abroad experience) or an approved service-learning or independent study course (three credits)
- INTL 499 Senior Seminar (one credit)

Students must fulfill an experiential learning requirement through an approved internship, service-learning course or study-abroad program. Additionally, students must complete foreign language study through the advanced level (300, 305, 320 or 321) by course or placement, unless this level of instruction is not available in the chosen language. (In such cases, the faculty adviser will assist the student in identifying appropriate language study options at other U.S. institutions or abroad.) International studies students also must fulfill the college general education requirements for the Bachelor of Arts degree.

To major in international studies, students must take course work that fulfills the requirements for either a general international studies major (offered with a humanities emphasis in the World School or a social science emphasis in the Wilder School), or students must choose a major with a global studies concentration (with options in both the World School or Wilder School) or a geographical area studies concentration (available only through the World School). Students may choose the program of study that best fits their interests. The general international studies option is outlined below; concentration areas may be reached by the links to the right.

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**General international studies major**

The following three courses (nine credits) are required:

1. INTL 101 Human Societies and Globalization (if not used as a core requirement) or INTL/POLI 105 International Relations (if not used as a core requirement)
2. INTL/POLI 330 Global Societies: Trends and Issues
3. INTL/POLI 362 International Organizations and Institutions

In consultation with their advisers, students will be required to complete 12 additional credits in international studies that comprise a coherent set of courses aimed at deepening knowledge in a particular area. Students interested in completing these credits with a social science emphasis should consult with advisers in the Wilder School, while those interested in completing these credits with a humanities emphasis should consult with advisers in the World School.

**Area studies concentrations**

See the program page for the **B.A. in International Studies** for a full description of degree requirements.

Area studies students must complete foreign language study of the region through the advanced level (300, 305, 320 or 321) and an approved language and cultural immersion experience in that region.

**European studies**

The following three courses (nine credits) are required:

1. HIST 101 Survey of European History
2. HIST 336 Modern European Intellectual History
3. INTL/POLI 352 European Governments and Politics

Students are required to complete four courses (12 credits) from Concentration List J as approved by the students’ advisers. (See [www.has.vcu.edu/wld/academics/minors/area_studies/listj.html](http://www.has.vcu.edu/wld/academics/minors/area_studies/listj.html) for list.)

**Latin American studies**

The following three courses (nine credits) are required:

1. HIST 109 or 110 Survey of Latin American History
2. INTL/ANTH 349 Rethinking a Continent: Latin America
3. SPAN 321 Latin American Civilization I or INTL/POLI 353 Latin American Governments and Politics

Students are required to complete four courses (12 credits) from Concentration List G as approved by the students’ advisers. (See [www.has.vcu.edu/wld/academics/minors/area_studies/listg.html](http://www.has.vcu.edu/wld/academics/minors/area_studies/listg.html) for list.)

**Global studies concentrations**

See the program page for the **B.A. in International Studies** for a full description of degree requirements.

Students may enroll in the international studies program in either the School of World Studies or the L. Douglas Wilder School of Government and Public Affairs. Those who choose to follow a global studies concentration may choose from the emphasis areas below.

**School of World Studies**

- International social justice studies
- World cinema

**L. Douglas Wilder School of Government and Public Affairs**

- Comparative studies
- International institutions and globalization

**Global studies concentrations in the World School**

**International social justice studies**

The following three courses (nine credits) are required:

1. RELS 340/INTL 341 Global Ethics and the World’s Religions
2. WRLD 210 International Social Justice Studies
3. WRLD 220 Human Rights and Literature
Students are required to complete two to four courses (six to 12 credits) from Concentration List M as approved by the students’ advisers. (See www.has.vcu.edu/wld/academics/majors/intstudies/listm.html for list.)

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World cinema
The following courses are required:
1. ANTH 331 Public Culture: Anthropology Through Film or RELS 422 Religion and Film
2. Select three credits from: ARTH 270 or 271 History of the Motion Picture, ARTH 471 Film Theory or ENGL 385 Fiction into Film
3. WRLD 230 Introduction to World Cinema
4. WRLD 330 Introduction to Film Studies
5. WRLD 422 National Cinema (must be repeated for 6 credits with different topics)
6. WRLD 430 Film and the City
7. WRLD 499 Senior Capstone Seminar

Global studies concentrations in the Wilder School
Comparative studies
The following three courses (nine credits) are required:
1. ANTH/INTL 457 Comparative Perspectives on Cultures and Societies
2. INTL/SCCY 330 Global Societies: Trends and Issues
3. INTL/POLI 361 Issues in World Politics or INTL/POLI 362 International Organizations and Institutions

Students are required to complete four courses (12 credits) from Concentration List N as approved by the students’ advisers. (See www.has.vcu.edu/wld/academics/majors/intstudies/listn.html for list.)

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International institutions and globalization
The following three courses (nine credits) are required:
1. INTL/AFAM/ECON 315 Economic Development
2. INTL/POLI 361 Issues in World Politics
3. INTL/POLI 362 International Organizations and Institutions

Students are required to complete four courses (12 credits) from Concentration List B as approved by the students’ advisers. (See www.has.vcu.edu/wld/academics/minors/global_studies/listb.html for list.)

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Islamic studies, minor in
A minor in Islamic studies consists of 18 credits, including:
RELS 317/INTL 317 Islam
At least three (nine credits) of the following:
HIST 328 Modern Middle East
RELS/WMNS 371 Islam and Women
RELS/INTL 409 Modern Islamic Thought and Global Trends
RELS/INTL 441 Islamic Mysticism: the Sufis

Students may select from any of the following courses to complete the 18 credit minor requirement:
FRLG 101 Foreign Languages: Arabic
HIST 391 Topics in History, with approved topic
INTL/FRLG 204 Language and Groups in the United States, with approved topic
POLI/INTL 351 Governments and Politics of the Middle East
RELS 490 Seminar in Religious Studies, with approved topic
RELS 491 Topics in Religious Studies, with approved topic
RELS 492 Independent Study, with permission of adviser and Islamic studies professor

Other relevant courses may be accepted with the approval of an adviser.

Italian studies, minor in
A minor in Italian studies requires at least 18 credits, none of which can be earned at the 100 level. Only six credits may be earned by completing ITAL 201 and ITAL 202 or ITAL 205. At least six credits must be taken at the 300 level or above from courses taught in Italian. The remaining six credits can be taken from courses taught in either Italian or English. Courses taught in English must focus on subjects related to Italian culture, such as literature in translation, cultural studies or Italian cinema.

Note: Language placement test results cannot substitute for completion of course work. Italian studies minors must take at least two upper-level courses at VCU in Italian.

Judaic studies, minor in
Jack D. Spiro
Affiliate Professor of Religious Studies and Director, Judaic Studies Program
www.vcu.edu/judaicstudies

A minor in Judaic studies consists of 18 credits chosen from the following:
HIST 324 The Holocaust
HIST 325, 326/RELS 318, 319 History of the Jewish People
RELS 301 Introduction to the Hebrew Bible
RELS 305 Hebrew Prophets
RELS/INTL 306 Introduction to Judaism
RELS/HIST 335 The American Jewish Experience
RELS 407 Modern Jewish Thought
Other courses which may be developed with approval of the director

Latin American studies, minor in
The Latin American studies minor consists of 18 credits. A minimum of 12 credits must be earned at the upper (300- or 400-) level. No more than 6 credits can be earned within the same discipline.

Students must complete a minimum of three credits of Spanish or Portuguese at the advanced level (300 or above).

Note: Language Placement Test results cannot substitute for completion of course work.

Students choose from the following courses to complete the minor:
Minimum of 3 credits:
PORT 391 Topics in Portuguese*
SPAN 321 Latin American Civilization I
SPAN 322 Hispanic Immigrants in the U.S.
SPAN/INTL 332 Latino Writers in the U.S.
SPAN/INTL 421 Civilization of Latin America II
SPAN 430 Literary Genres*
SPAN 432 Hispanic Culture Through Literature
SPAN 491 Topics in Spanish*

Minimum of 3 credits:
ANTH/INTL 348 South American Ethnography
ANTH/INTL 349 Rethinking a Continent: Latin America
ANTH 391 Topics in Anthropology*

Minimum of 3 credits:
HIST 109 Survey of Latin American History
HIST 110 Survey of Latin American History
HIST 391 Topics in History*

Minimum of 3 credits:
ARTH 335 Pre-Columbian Art and Architecture
ARTH 338 Colonial Art and Architecture of Latin America
ARTH 339 Modern and Contemporary Art and Architecture of Latin America
ARTH 450 Art and Architecture of Mesoamerica
FLET/INTL 391 Foreign Literature in English Translation*
INTL 491 Topics in International Studies*
POLI/INTL 335 Latin American Governments and Politics
RELS 490 Seminar in Religious Studies
The Mediterranean studies minor consists of 18 credits. A minimum of 12 credits must be earned at the upper (300- or 400-) level. No more than six credits can be earned within the same discipline.

Students must complete a minimum of three credits of geographically pertinent foreign language course work (Arabic, French, Hebrew, Italian, Portuguese or Spanish) at the advanced level (300 or above). If VCU does not offer courses in a specific Mediterranean language (e.g. Albanian, Catalan, Croatian, Turkish, Modern Greek, etc.), the School of World Studies Advising Office will assist students in identifying appropriate language study options at other U.S. institutions or abroad.

Note: Language Placement Test results cannot substitute for completion of course work.

Minimum of 6 credits from the following:

- RELS 310 Mediterranean Religions
- RELS/INTL 312 Religions of the World
- WRLD/INTL 203 Cultural Texts and Contexts*

Students choose from the following courses to complete the minor:

ANTH/INTL 455 Anthropology of Development and Globalization

ARTH 103 or 104 Survey of Western Art

ARTH 310 Medieval Art and Architecture

ARTH 315 Renaissance Art and Architecture

ARTH 320 Baroque and Rococo Art and Architecture

ARTH 417 The High Renaissance

ARTH 421 The Baroque in Southern Europe

EUCU 311 Classical Mythology

FLET/INTL 391 Topics in Foreign Language in English Translation*

FREN/INTL 450 Francophone Literatures and Cultures

HIST 304 Roman Civilization

HIST 308 Europe in Renaissance

HIST 315, 316 History of France

HIST 339, 340/WMNS 339, 340 History of Women in Europe

INTL 490 Seminar in International Issues*

INTL 491 Topics in International Studies*

ITAL 320 Italian Cinema

ITAL 330 Themes in Italian Literature

ITAL 391 Topics in Italian*

PHIL 103 Ancient Greek and Medieval Western Philosophy

RELS 315, 316/HIST 301, 302 The Ancient Near East

SOCI/WMNS 334 Sociology of Women

SPAN 420 Civilization of Spain II

URSP 350/INTL 345/FRLG 345 Great Cities of the World

WMNS 391 Topics in Women’s Studies*

WRLD 391 Topics in World Languages and Cultures*

WRLD 491 Topics in World Languages and Cultures*

Courses taken through an approved study abroad program in an appropriate location (must be preapproved through the SWS Advising Office).

*When appropriate: Always check first with the SWS Advising Office before enrolling in these courses.

Note: Other courses (humanistic as well as scientific) that focus on the Mediterranean (as a sea or as a region) are welcome. If students wish to fulfill an elective with a course not listed above, the course must be discussed and approved by the School of World Studies Advising Office.

**Religious Studies, Bachelor of Arts (B.A.)**

*Mark D. Wood*

Associate Professor and Program Coordinator

www.worldstudies.vcu.edu/religion

The Bachelor of Arts in Religious Studies offers a flexible program of interdisciplinary courses on humanity’s major religious traditions and religious culture in the context of globalization. Students explore the artistic, ethical, literary, psychological and social dimensions of religions, as well as their influence on gender, sexuality, race, nationality, health, the environment, human rights and social justice. Religious studies emphasizes excellence in written, oral and visual interpretation and communication, critical thinking, informed conversation and an international worldview. The religious studies program is committed to combining classroom-based and community-based learning through study-abroad programs and community engagement.

The religious studies program is guided by the idea that understanding humanity’s diverse and developing religious traditions is vital to understanding what it means to be human and to live wisely as members of the planetary community. With endowed chairs in Judaic studies, Catholic studies, Islamic art and the history of Christianity, a dynamic city whose cultural mosaic is composed of the world's religious traditions and a lively community of faculty and students, the religious studies program offers an excellent place to study the ongoing development of humanity’s global religious life.

**Degree requirements – Bachelor of Arts in Religious Studies**

The Bachelor of Arts in Religious Studies requires a minimum of 120 credits, with at least 31 credits in religious studies courses or in courses listed as acceptable for religious studies credit. Up to six credits in Hebrew, Greek, Arabic, Japanese or Chinese language courses may be accepted within the required 31 credits of the program if approved by the curriculum committee of the religious studies division; that same committee may approve occasional substitutions within religious studies major requirements should the needs and background of an individual student warrant such substitutions. Religious studies majors are encouraged to consider a second major or minor that complements their study of the world’s religions (e.g. in a foreign language or international studies).

**Requirements**

1. **Western religions: Select two of the following courses (six credits).**

   - RELS 280 Introduction to Catholic Studies
   - RELS 301 Introduction to the Hebrew Bible
   - RELS 302 Introduction to the New Testament
   - RELS 303 Intertestamental Literature and Thought
   - RELS 305 Hebrew Prophets
   - RELS/INTL 306 Introduction to Judaism
   - RELS 307/AFAM 307/INTL 307 Black Religion
   - RELS 308/HIST 307 The High Middle Ages
   - RELS 309/HIST 309 The Reformation
   - RELS 312 Religions of the World
   - RELS 313 Life and Literature of Paul
   - RELS 314 Jesus in the New Testament Tradition
   - RELS 315, 316/HIST 301, 302 The Ancient Near East
   - RELS 317/INTL 317 Islam
   - RELS 318, 319/HIST 325, 326 History of the Jewish People
   - RELS 327/HIST 327 History of Christianity
   - RELS 335/HIST 335 The American Jewish Experience
   - RELS 371/WMNS 371 Islam and Women
   - RELS 373/WMNS 373 Women and the Bible
   - RELS 380 Contemporary Catholic Thought
   - RELS 407 Modern Jewish Thought
   - RELS 409/INTL 409 Modern Islamic Thought and Global Trends
   - RELS 441/INTL 441 Islamic Mysticism: the Sufis

2. **Eastern religions: Select two of the following courses (six credits).**

   - RELS 311 Religions of the World
   - RELS 320 Taoism
   - RELS 322/PHIL 322 Tibetan Buddhism
   - RELS 342/PHIL 342 Buddhist Reasoning and Debate
   - RELS 368 Asian Religions and Asian Medicine
   - RELS 408/PHIL 408 Indian Tradition
   - RELS 410/PHIL 410/INTL 410 The Chinese Tradition in Philosophy
   - RELS 412/PHIL 412/INTL 412 Zen Buddhism
   - RELS 442 Seminar in Hinduism

3. **Methods: Select one of the following courses (three credits).**

   - RELS 333/PSYC 333 Psychology and Religious Experience
   - RELS 360/SOCY 360 Sociology of Religion
   - RELS 361/ENGL 361 The Bible as Literature
   - RELS 430/PHIL 430 Philosophy of Religion

4. **Themes: Select one of the following courses (three credits).**

   - RELS 250 Death: Myth and Reality
which may be earned at the 100 level. Only six credits may be earned by
enrolling in these courses.

*When appropriate: Always check first with the SWS Advising Office before
location (must be preapproved through the SWS Advising Office).

Courses taken through an approved study abroad program in an appropriate

The minor in religious studies consists of 18 credits in religious studies, with at
least nine of those credits in upper-level courses.

A minor in Russian studies requires at least 18 credits, none of which may be
eraned at the upper (300- or 400-) level. Note: Language Placement Test results cannot substitute for completion of
course work.

The remaining nine credits may be earned from courses taught either in Russian or
in English that relate to Russian history, politics, society or culture, to be selected from
the following:

ENGL 391 Topics in Literature*  
FLET/INTL 391 Topics in Foreign Literature in English Translation*  
GEOG/INTL 334 Regional Geography of ________  
HIST 321 History of Russia  
HIST 322 History of Russia  
HIST 332 History in Film*  
HIST 391 Topics in History*  
INTL 490 Seminar in International Issues  
INTL 491 Topics in International Studies*  
POLI/INTL 354 Russian and Post-Soviet Politics  
RUSS 311 Conversation and Media (in Russian)  
RUSS 330 Literature and Culture (in Russian)  
RUSS 422 Russian Film (in Russian)  
RUSS 491 Topics in Russian (in Russian)  
SOCY/INTL 328 Russian Society in Transition  
URSP 350/FRLG 345/INTL 345 Great Cities of the World*  
WRLD/INTL 203 Cultural Texts and Contexts*  
WRLD 220 Human Rights and Literature*  
WRLD 391 Topics in World Languages and Cultures*  
WRLD 491 Topics in World Languages and Cultures*  
Courses taken through an approved study abroad program in an appropriate
location (must be preapproved through the SWS Advising Office).

*When appropriate: Always check first with the SWS Advising Office before
enrolling in these courses.

The world cinema minor consists of 18 credits. A minimum of 12 credits must be
eraned at the upper (300- or 400-) level. Students must complete all courses listed below (for a total of 12 credits):

WRLD 230 Introduction to World Cinema  
WRLD 330 Introduction to Film Studies  
WRLD 422 National Cinema  
WRLD 430 Film and the City  

Students select one course (3 credits) from the following:

ARTH 270 or 271 History of the Motion Picture  
ARTH 471 Film Theory  
ENGL 385 Fiction into Film
The School of Allied Health Professions was established on Jan. 1, 1969, to provide an administrative structure for existing educational programs in allied health disciplines and to direct the development of new programs in response to the growing need for allied health manpower. At the outset, the school incorporated existing educational programs for hospital administration, medical technology, physical therapy and radiologic technology and X-ray technicians.

In the years since its establishment, the school has grown significantly — developing unique, cutting-edge curricula and degree offerings in both traditional and nontraditional formats — to meet the increasing demand for allied health teachers, researchers and practitioners. Considered a leader in distance education, VCU’s School of Allied Health Professions offers the only interdisciplinary, Internet-based doctoral program in allied health in the country: the Ph.D. in Health Related Sciences. The school currently incorporates nine departments and offers programs at the baccalaureate, certificate, master’s, doctoral and professional levels.

Administration
1200 East Broad Street
P.O. Box 980233
Richmond, Virginia 23298-0233
(804) 828-7247
Fax: (804) 828-8656
www.sahp.vcu.edu

Cecil B. Drain
Dean

Alexander F. Tartaglia
Associate Dean

J. James Cotter
Assistant Dean

Brian T. McMahon
Assistant Dean for Research

Debra A. Ropelewski
Assistant Dean for Fiscal Affairs

Jessica F. Gurganus
Assistant Dean for Advancement

Jeffrey R. Lodge
Director of Information Systems

Monica White
Director of Student Services

Philosophy
The faculty of the school is committed to offering, through the establishment and maintenance of rigorous standards of excellence, educational programs that will prepare students for professional careers in the allied health disciplines. Development of professional attitudes, emotional maturity and ethical behavior of students is a vital component of the educational process. It is essential that students gain a deep respect for the dignity of human beings and the inherent rights of patients and others who receive services. The programs are designed to include not only the development of skills to assure excellence in quality of health care, but also factual knowledge and experiences that will provide the basis for continuing intellectual and professional growth.

Community services of the school and faculty include continuing education, consultative resources and participation in all pertinent areas of health care. An integral part of these efforts is to stimulate and sponsor research activities in the allied health disciplines represented within the school and to encourage interdisciplinary research.

Accreditation
The School of Allied Health Professions is an institutional member of the American Society of Allied Health Professions and the Virginia Association of Allied Health Professions. All of its programs are approved or accredited by the appropriate national professional or educational organizations.

Clinical laboratory sciences (bachelor’s degree)
National Accrediting Agency for Clinical Laboratory Sciences
5600 N. River Road, Suite 720, Rosemont, IL 60018-5519; (847) 939-3597, (773) 714-8880 or (773) 714-8886 (fax); infor@naacls.org; www.naacs.org. Upon graduation the student is eligible to take the national examination for MLS given by the Board of Certification of the American Society for Clinical Pathology.

Health administration (master’s and executive master’s degrees)
Commission on Accreditation of Healthcare Management Education

Nuclear medicine technology (bachelor’s degree in Clinical Radiation Sciences)
Joint Review Committee on Educational Programs in Nuclear Medicine Technology

Nurse anesthesia (master’s, doctorate)
Council on Accreditation of Nurse Anesthesia Educational Programs (COA, 222 South Prospect Avenue, Park Ridge, Illinois, 847-692-7050).

The COA is recognized by the U.S. Department of Education and the Council on Higher Education Accreditation to accredit programs of nurse anesthesia at the master’s, post-master’s and doctoral levels.

Graduates of the master’s program are eligible to take the examination for certification conducted by the Council on Certification of Nurse Anesthetists.

Occupational therapy (master’s degree)
Accreditation Council for Occupational Therapy Education

Patient counseling (certificate)
Association for Clinical Pastoral Education

Physical therapy (D.P.T.)
Commission on Accreditation in Physical Therapy Education, American Physical Therapy Association

Radiation therapy technology (bachelor’s degree in Clinical Radiation Sciences)
Joint Review Committee on Education in Radiologic Technology

Radiography (bachelor’s degree in Clinical Radiation Sciences)
Joint Review Committee on Education in Radiologic Technology

Rehabilitation counseling (master’s degree)
Council on Rehabilitation Education

Programs
Both entry- and advanced-level undergraduate, graduate, professional and certificate programs are offered by the School of Allied Health Professions. University and accreditation requirements for the individual programs guide the establishment of general admission prerequisites and course and degree requirements. Regulations and procedures for each program are outlined in these bulletins and are intended to ensure the selection of applicants whose motivation, ability, character and health status qualify them to pursue their program of study successfully.

Programs currently offered by this school and the degrees conferred on their graduates are:

School of Allied Health Professions
- Ph.D. in Health Related Sciences

Department of Clinical Laboratory Sciences
- Bachelor of Science
- Master of Science

Department of Gerontology
- Post-baccalaureate graduate certificate in aging studies
- Post-baccalaureate graduate certificate in aging studies and Master of Social Work offered jointly with the VCU School of Social Work
- Master of Science

Department of Health Administration
- Master of Health Administration
- Master of Health Administration and Doctor of Medicine (offered jointly with the VCU School of Medicine)
- Master of Health Administration and Juris Doctor (offered jointly by the T. C. Williams School of Law at the University of Richmond and the Washington and Lee University School of Law)
• Master of Science in Health Administration (Professional M.S.H.A. Program – Online)
• Ph.D. in Health Services Organization and Research

Department of Nurse Anesthesia
• Doctor of Nurse Anesthesia Practice
• Master of Science in Nurse Anesthesia

Department of Occupational Therapy
• Master of Science in Occupational Therapy
• Master of Science
• Occupational Therapy Doctorate

Program in Patient Counseling
• Post-baccalaureate graduate certificate in patient counseling
• Master of Science
• Master of Science and Master of Divinity (offered jointly by the School of Theology at Virginia Union University and the Baptist Theological Seminary)

Department of Physical Therapy
• Doctor of Physical Therapy
• Tracks in physical therapy in the Ph.D. programs offered in Anatomy and Neurobiology or Physiology in the VCU School of Medicine
• Ph.D. in Rehabilitation and Movement Science

Department of Radiation Sciences
• Bachelor of Science

Department of Rehabilitation Counseling
• Master of Science
• Master of Science in Rehabilitation Counseling and certificate in aging studies
• Post-baccalaureate graduate certificate in professional counseling

Licensure/certification
Graduates of most of the programs offered in the School of Allied Health Professions are required or eligible to take national and/or state certification or licensure examinations. Requirements of licensing and certifying agencies vary. Some licensure and certification agencies consider individuals convicted of a felony ineligible for licensure or certification. For information, prospective students should contact the licensure or certification agency for the specific allied health discipline.

Attendance regulations
The faculty considers attendance at lectures, laboratories and other functions a requisite to the successful acquisition of the knowledge and skills required of the professional. Hence, the faculty cannot condone absence without good reason from any regularly scheduled educational experience. At the beginning of each course, instructors relate to their classes the policy of the department concerning the attendance regulations for that semester. The nature of make-up work in the event of absence will be the prerogative of the instructor.

Student performance and behavior
The goals and objectives of the School of Allied Health Professions and its component departments and programs relate to the education of persons preparing for professional careers in the allied health disciplines. An integral requisite of students and practitioners is an undeviating acceptance of a professional attitude and pride that will motivate them to adhere to a code of professional ethics and to develop fully their competencies for practice.

If, in the judgment of the faculty and administration of the School of Allied Health Professions, a student is not considered suitable for emotional, professional or related reasons, the student’s academic status may be appropriately altered.

If any questions arise regarding the standards of performance or behavior, it is the responsibility of students to apprise themselves of acceptable character and conduct requirements prior to matriculation in the designated department or program.

Standards of professional behavior
These standards describe behaviors expected from the faculty and students of the School of Allied Health Professions. They are in addition to those standards of behavior and ethical conduct required by the school’s departments and professional organizations. They are supplemental to the university statement regarding conduct in the classroom.

• Recognize one’s position as a role model of your profession for other members of the health care team.
• Carry out academic, clinical and research responsibilities in a conscientious manner, making every effort to exceed expectations and demonstrating a commitment to lifelong learning.
• Treat patients, faculty and students with respect, demonstrating sensitivity to diversity regarding ethnicity, culture, age, gender, disability, social and economic status, sexual orientation, etc., without discrimination, bias or harassment.
• Maintain patient/client confidentiality.
• Respect the privacy of all members of the campus community and avoid promoting gossip and rumor.
• Interact with all members of the health care team in a collaborative and supportive fashion, with respect and recognition of the roles played by each individual.
• Provide help or seek assistance for any member of the health care team who is recognized as impaired in his/her ability to perform his/her professional obligations.
• Be mindful of the limits of one’s knowledge and abilities and seek help from others whenever appropriate.
• Abide by accepted ethical standards in the scholarship, research and practice of patient/client care.
• Abide by the guidelines of the VCU Honor System.

Financial aid
Financial aid is available for all students meeting the criteria for financial assistance. For details of the programs available contact the Financial Aid Office, P.O. Box 980244, Richmond, VA 23298-0244 or telephone (804) 828-9800. The school and departments also offer financial awards, honors and scholarships. Details may be found on the school’s and individual departments’ Web sites at www.sahp.vcu.edu.

Undergraduate information
Preparatory study for clinical laboratory sciences
The University College provides programs in preparation for admission into health sciences programs. For detailed information on pre-clinical laboratory sciences, see Preparation for the study of clinical laboratory sciences in the UC section of this bulletin.

Preparatory study for clinical radiation sciences
The University College provides programs in preparation for admission into health sciences programs. For detailed information on pre-radiation sciences, see Preparation for the study of radiation sciences in the UC section of this bulletin.

Department of Clinical Laboratory Sciences
The Department of Clinical Laboratory Sciences supports the philosophy and mission of the university and the School of Allied Health Professions, and
provides an environment that nurtures excellence in education, research and service. The programs offered by the department are dedicated to enhancing and promoting clinical laboratory science. The department fosters fair and equitable educational experiences for students of all ages and diverse backgrounds. Strong affiliations with clinical educators and the integration of innovative technology in the academic setting facilitate both the education and research goals of the department.

The department provides students with superior studies in clinical laboratory science, including both theoretical and applied clinical education, and develops problem-solving expertise, leadership capabilities and communication skills. By providing advanced theoretical and technical education, the graduate program serves to maintain and update the competency of laboratory professionals and to prepare students to assume roles as laboratory supervisors, university educators and researchers. A mature, responsible approach to the acquisition of knowledge is cultivated in order to establish continuing intellectual growth and an enthusiasm for the profession.

The department meets the growing health care needs of the community by providing highly competent and professional clinical laboratory scientists who will be able to function effectively upon entrance into the field and be prepared to explore future scientific and technological advances in laboratory science. And the department promotes continued professional development and personal growth for the faculty and staff to fulfill and balance the individual’s abilities and aspirations with the departmental, school and institutional mission and needs. Members of the department conduct themselves in a forthright, ethical manner and practice the highest standard of quality performance.

The objectives of the Department of Clinical Laboratory Sciences are:

- To provide an educational program that prepares students to accurately perform and evaluate analytical tests on body fluids, cells and products.
- To foster the development of professional conduct, interpersonal communication skills and ethical principles.
- To develop and promote strategies for lifelong learning and to encourage continued professional growth through research, continued education and active participation in professional societies.

**Administration**

Teresa S. Nadder  
Associate Professor and Department Chair

Emily M. Hill  
Instructor and Assistant Chair

**History**

Clinical laboratory scientists have been trained on the MCV Campus since 1927. However, the Department (formerly school) of Medical Technology was not formally established until 1952, at which time the curriculum included six months of didactic experience with lectures and laboratory sessions held in the department, followed by a six-month rotation through the clinical laboratories. The school offered a certificate and/or bachelor’s degree program; the certificate program was discontinued during the 1961-62 school year.

In 1974 the curriculum was expanded to the current two-plus-two year program in which students complete 60 semester hours of prerequisites followed by two years of professional course work. The graduate program in clinical laboratory sciences was started in 1967 to provide advanced education for certified medical technologists/clinical laboratory scientists. In 1985 the program was modified to allow candidates holding a degree in another area of science to obtain graduate education in clinical laboratory sciences. In 1994, the department name was changed to the Department of Clinical Laboratory Sciences. In 2003, an accelerated track was initiated to integrate the undergraduate and graduate programs, which requires completion of two years of prerequisites and three years of full-time professional course work, and leads to the simultaneous awarding of both the bachelor’s and master’s degrees.

**Facilities**

The Department of Clinical Laboratory Sciences is located in the Randolph Minor Hall on the MCV Campus. All faculty and clerical offices are located in this facility, as well as student classrooms, general teaching laboratory, computer facilities and a student lounge/reading room.

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**Clinical laboratory sciences courses**

Descriptions for all courses offered by the university may be accessed through the online courses database at [www.pubapps.vcu.edu/veucourses](http://www.pubapps.vcu.edu/veucourses). You may search by unit, subject or keyword, as well as by degree level.

Follow this link to clinical laboratory sciences (CLLS) courses.

---

**Clinical Laboratory Sciences, Bachelor of Science (B.S.)**

Clinical laboratory scientists receive training in the following areas: clinical chemistry, the study of chemical reactions that occur in normal and diseased processes; hematology, the study of the cellular elements of the blood and blood-forming tissues; microbiology, the study of microbiological aspects of infectious disease, and the isolation and identification of pathogenic bacteria; immunohematology, the application of theory and principles of blood banking, cell typing, compatibility testing and antibody identification; and immunology, the study of the immune system and the serological and molecular techniques used for diagnosing infectious disease. With the rapid advancement of knowledge in the field of laboratory medicine, there is a growing need for highly skilled and knowledgeable clinical laboratory scientists. Employment is found in hospitals; physicians’ offices; research facilities; molecular diagnostic, biotechnology and public health laboratories; industrial quality control; veterinary clinics; and sales and service of health care equipment. In addition to the technical area, opportunities as managers or consultants exist for graduates of this program.

Upon graduation the student is eligible to take the national examination for MLS given by the Board of Certification of the American Society for Clinical Pathology.

**Admissions requirements**

The basic requirements for admission to the baccalaureate program in clinical laboratory sciences are as follows:

Students with no previous clinical laboratory training must have completed at least 60 semester hours at an accredited college or university, including:

- Biology: 12 hours to include general biology; human physiology and anatomy recommended
- Chemistry: 12 hours to include 8 hours of general chemistry with the remaining 4 hours in (in order of preference) quantitative analysis, organic chemistry or qualitative analysis
- English: 6-9 hours of composition*
- Mathematics: 3 hours; additional mathematics or physics recommended.
- Humanities/arts: 3 hours (selected from courses in history, philosophy, political science, religion, foreign languages, literature, art history or art appreciation)
- Social sciences: 3 hours (selected from courses in anthropology, economics, geography, psychology or sociology)

NOTE: Survey courses in biology or chemistry are not acceptable.

*VCU: UNIV 111-112 and UNIV 200 or their equivalents

In addition to the academic requirements, there are "essential functions" (non-academic requirements) that students must master to successfully participate in the program. The following is a list of the essential technical abilities and skills applicants for admission to the clinical laboratory science program should possess:

- Manual dexterity: ability to use hand(s) or prosthetic devices with coordination
- Fine motor: ability to manipulate small objects with fingertips or adaptive devices
- Mobility: ability to maneuver in the laboratory and around instruments and in patient-care settings
- Vision: ability to distinguish red, yellow and blue colors; distinguish clear from cloudy; and distinguish objects through a microscope
- Hearing: ability to hear with assistive devices (i.e., phone receivers, hearing aid, etc.)
- Speech: ability to verbally communicate in English
• Writing: ability to communicate effectively in written form in English.
• Reading: ability to read, understand and follow directions printed in English
• Emotional and physical stability: ability to work accurately and safely under stress, adapt to changing environments and prioritize tasks.
• Personal attributes: must demonstrate integrity, responsibility, tolerance and respect

For applicants with an associate degree in laboratory science
Certified MLTs (CLTs) qualify for special admission with less than 60 hours of credit. An MLT (CLT) applicant must have a minimum of 44 non-MLT semester hours of transferable credit for admission as a full-time student (38 hours for part-time admission). The transfer hours must include: 8 hours of biology, 8 hours of chemistry, 3 hours of mathematics and 6 hours of English composition. Admissions are under special status are required to complete the science, humanities and social sciences requirements for regular admission before they qualify for graduation.

CLS credit may be granted for upper-level course requirements through challenge examinations or exemptions based on documented competencies, depending upon a student’s past academic performance in previous course work and clinical experience.

MLTs (CLTs) who meet the exemption eligibility requirements for the junior-level laboratory portions of the curriculum may take the CLS course work online.

Academic regulations
The minimum passing grade for all professional courses leading to the Bachelor of Science degree is “D.” All courses must be completed with a passing grade for the student to be eligible for promotion or graduation. Satisfactory completion of the previous semester’s course work is a prerequisite to the next semester.

Promotion is based on recommendations of the faculty. The student is expected to do all of the following:
• Maintain a GPA of 2.0 or better.
• Obtain a passing grade in all courses.
• Complete the clinical education requirements to the satisfaction of the clinical and academic faculty.
• Exhibit the attitudes and skills deemed necessary to function as a professional clinical laboratory scientist.
• Pay all fees.

Detailed grading policies plus the mechanism for grade appeals are given to each entering student during orientation.

Curriculum
Variable credit is offered in consideration of the differing academic backgrounds of entering students. Credits given for each course are those required of the traditional student with no previous clinical training.

<table>
<thead>
<tr>
<th>Junior year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLLS 301-302 Hematology</td>
<td>7.5</td>
</tr>
<tr>
<td>CLLS 304 Urine and Body Fluid Analysis</td>
<td>2.0</td>
</tr>
<tr>
<td>CLLS 306 Immunohematology</td>
<td>4.5</td>
</tr>
<tr>
<td>CLLS 307 Introduction to Pathogenic Microbiology</td>
<td>3.0</td>
</tr>
<tr>
<td>CLLS 308 Pathogenic Bacteriology</td>
<td>5.0</td>
</tr>
<tr>
<td>CLLS 310 Clinical Immunology</td>
<td>4.5</td>
</tr>
<tr>
<td>CLLS 311 Clinical Chemistry and Instrumentation I</td>
<td>5.0</td>
</tr>
<tr>
<td>CLLS 312 Clinical Chemistry and Instrumentation II</td>
<td>5.0</td>
</tr>
<tr>
<td>Summer session</td>
<td></td>
</tr>
<tr>
<td>CLLS 337 Clinical Education</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37.5</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLLS 407 Interpretive Immunohematology</td>
<td>2.5</td>
</tr>
<tr>
<td>CLLS 408 Advanced Microbiology</td>
<td>2.0</td>
</tr>
<tr>
<td>CLLS 409 Interpretive Hematology</td>
<td>2.0</td>
</tr>
<tr>
<td>CLLS 410 Advanced Clinical Chemistry and Instrumentation</td>
<td>2.0</td>
</tr>
<tr>
<td>CLLS 411 Principles of Education/Management</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1.0</strong></td>
</tr>
</tbody>
</table>

CLLS 415 Special Topics in Clinical Laboratory Sciences (optional)
CLLS 438 Research Paper (optional)
CLLS 483 Biochemistry Practicum
CLLS 485 Hematology Practicum
CLLS 493 Clinical Microbiology Practicum
CLLS 494 Miscellaneous Clinical Practicum
CLLS 496 Blood Bank Practicum

**Total** 27.5-34

Upon completion of prerequisite courses and the prescribed curriculum listed above, graduates of the Clinical Laboratory Sciences program will have fulfilled the general education requirements of VCU.

Department of Radiation Sciences
The Department of Radiation Sciences is an integral part of the School of Allied Health Professions and shares its values. The department serves as a national leader in the education of students in the radiation sciences and provides learning opportunities that are innovative and educationally sound. Strong linkages with clinical affiliates and their staffs are vital to the department’s success. Faculty and staff work in a cooperative spirit in an environment conducive to inquisitiveness and independent learning to help a diverse student body develop to its fullest potential. The faculty is committed to the concept of lifelong learning and promotes standards of clinical practice that will serve students throughout their professional careers. Faculty members serve as resources for professionals in practice and contribute to an expanded knowledge base in the field of clinical radiation sciences.

Goals
The goals of the Department of Radiation Sciences are to:
• Deliver thoughtfully developed curricula in radiation sciences for individuals preparing for professional practice.
• Provide an educational atmosphere that will engender intellectual curiosity and commitment to lifelong learning.
• Cultivate professional behavior and ethical conduct.
• Promote research and scholarly activity in the radiation sciences and health-related sciences.
• Offer timely, relevant educational opportunities that encourage practicing professionals to complete a baccalaureate degree.

Administration
Jeffrey S. Legg
Associate Professor and Department Chair
www.sahp.vcu.edu/radsci

History
Radiologic technology education began at the Medical College of Virginia in the 1930s with a one-year training program in radiography. This program has undergone a number of changes through the years to evolve into the current baccalaureate educational program.

A concentration in nuclear medicine technology was added in 1984 and in radiation therapy in 1992. Degree-completion programs have been added to provide an opportunity for certified technologists and therapists to complete requirements for the baccalaureate degree.

Facilities
The educational facilities for the Department of Radiation Sciences are located at 701 W. Grace St., Suite 2100. These facilities include energized laboratories in radiography, nuclear medicine, radiation therapy and mammography. The radiography laboratory includes a digital imaging system. In addition, the radiation therapy laboratory has a 3-D treatment planning system.

During the various phases of the curriculum, students will be assigned to one or more of the following affiliate institutions: VCU Health System’s MCV Hospitals,
McGuire Veterans Affairs Medical Center, CJW Medical Center, Southside Regional Medical Center and Henrico Doctors’ Hospitals.

Clinical radiation sciences courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow these links to clinical radiation sciences (CLRS) courses or the (CLRZ) laboratories.

Clinical Radiation Sciences, Bachelor of Science (B.S.)

Jeffrey Legg, Ph.D.
Chair, Department of Radiation Sciences
jlegg@vcu.edu
(804) 828-9104
www.sahp.vcu.edu/radsci

The VCU Department of Radiation Sciences offers three distinct programs leading to a Bachelor of Science in Clinical Radiation Sciences for:

• Those seeking initial entry into the radiation sciences (entry-level programs)
• Certified radiographers seeking advanced specialization in a different modality (second modality)
• Technologists or therapists seeking to advance a bachelor’s degree in their current modality (degree-completion programs)

Entry-level programs

The department offers a Bachelor of Science in Clinical Radiation Sciences with the following areas of concentration: radiography, nuclear medicine technology and radiation therapy. Upon meeting prerequisites and gaining admission to the program, students complete a three-year, full-time program that includes general education and professional course work. Graduates of each of the programs are eligible for national certification examinations in their respective area of concentration.

Upon completion of one of the concentrations, the graduate is eligible for the relevant national certification examination administered by the American Registry of Radiologic Technologists. Graduates of the nuclear medicine technology program also are eligible for the certification examination administered by the Nuclear Medicine Technology Certification Board.

Second modality programs

The department offers second modality B.S. degree concentrations for American Registry of Radiologic Technologists-certified radiographers who desire to continue their professional education and concentrate in radiation therapy, nuclear medicine technology or radiologist assistant. Upon meeting admission prerequisites, students complete a five-semester, full-time course of study including didactic, laboratory and clinical education. Graduates are eligible for additional national professional certification examinations.

Degree-completion programs

Full- or part-time opportunities to complete a baccalaureate degree are offered for technologists or therapists certified by the American Registry of Radiologic Technologists and/or the Nuclear Medicine Technology Certification Board. In addition to general education and professional course work, the student selects electives from a wide variety of courses, allowing the design of a program that best meets the goals and interests of the individual.

Admission information

Follow this link to see admission requirements for the various programs. For additional information on admission you may also visit www.sahp.vcu.edu/radsci/admissions.htm

Admission requirements

Entry-level program prerequisites

To be eligible for admission into any of the entry-level concentrations students must have completed the following prerequisites:

<table>
<thead>
<tr>
<th>Semester credits/subject</th>
<th>VCU equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 of composition and rhetoric</td>
<td>UNIV 111-112*</td>
</tr>
<tr>
<td>3 of college algebra</td>
<td>MATH 141</td>
</tr>
<tr>
<td>8 of human anatomy and physiology (includes lab)</td>
<td>BIOL 205**, PHIS 206** and PHIZ 206</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester credits/subject</th>
<th>VCU equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 of physics (includes lab)</td>
<td>PHYS 101 and PHYZ 101</td>
</tr>
<tr>
<td>3 of general psychology</td>
<td>PSYC 101</td>
</tr>
<tr>
<td>3 of humanities</td>
<td>VCU students – Select a course from the approved University Core humanities/fine arts list</td>
</tr>
</tbody>
</table>

Transfer students – Refer to the VCU Transfer Guide for an appropriate selection of courses in literature, religion, philosophy, history, foreign language or speech.

* Students outside of VCU must complete 6 credits of freshman composition.
** At VCU this sequence requires four credits of biology with a C or better as a prerequisite.

Students will spend three years in the professional program upon entering in the fall semester. The program at VCU leads to a Bachelor of Science degree in clinical radiation sciences.

Second modality program prerequisites

This program requires ARRT certification in radiography and a minimum of an associate degree or equivalent. The radiologist assistant track also requires a minimum of one year of full-time clinical experience at the time of enrollment.

Certificate/A.A.S. degree holders

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English composition</td>
<td>3</td>
</tr>
<tr>
<td>Social sciences</td>
<td>3</td>
</tr>
<tr>
<td>Natural/physical science</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>2 credits*</td>
</tr>
<tr>
<td>General electives</td>
<td></td>
</tr>
</tbody>
</table>

* Radiologist assistant only

A.S./A.A./A.A.S./B.S. degree holders

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear medicine</td>
<td>10 credits general electives (including 8 credits of general chemistry)</td>
</tr>
<tr>
<td>Radiation therapy</td>
<td>11 credits general electives</td>
</tr>
<tr>
<td>Radiologist assistant</td>
<td>14 credits general electives</td>
</tr>
</tbody>
</table>

Degree completion program prerequisites

Certificate/A.A.S. degree holders

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English composition</td>
<td>3</td>
</tr>
<tr>
<td>Social sciences</td>
<td>3</td>
</tr>
<tr>
<td>Natural/physical science</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
</tbody>
</table>

A.S./A.A./A.A.S./B.S. degree holders

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General electives</td>
<td>12</td>
</tr>
</tbody>
</table>

For more information about the Department of Radiation Sciences, visit the website at www.sahp.vcu.edu/radsci.

General education requirements

1. Communicating

• UNIV 111 and 112 Focused Inquiry I and II or equivalent – six credits
• UNIV 200 Writing and Rhetoric - three credits
• CLRS 390 Research Methods in the Radiation Sciences – two credits; writing intensive
• CLRS 399 Introduction to Research – one credit, writing intensive
• CLRS 498 Senior Project – two credits, writing intensive

2. Ethics

• CLRS 208 Foundations of Patient Care – three credits
• CLRS 393-395, 397, 395, 493 and 494 Clinical Education I-V – seminars associated with each clinical course
• PHIL 213 Ethics and Health Care – three credits (Nuclear medicine only)

3. Quantity and form

• MATH 141 Algebra with Applications or equivalent – four credits
• STAT 210 Basic Practice of Statistics or equivalent – three credits
• CLRS 232 Radiation Safety – two credits
• CLRS 320 Radiographic Imaging and Exposure II – three credits
  (radiography only)
• CLRS 323 Radiation Therapy, Techniques and Applications – four credits
  (radiation therapy only)
• CLRS 341 Radiation Physics – two credits
• CLRS 461 Radiopharmaceutical: Preparation and Quality Control – two
  credits (nuclear medicine only)

4. Science and technology
• PHYS 101 Foundations of Physics – four credits
• BIOL 205, 206, 206L Basic Human Anatomy and Human Physiology and
  laboratories or equivalent – eight credits
• CHEM 101-102, CHEZ 101L-102L General Chemistry and laboratories or
  equivalent – eight credits (Nuclear Medicine only)

5. Interdependence
• CLRS 393-394, 395, 493 and 494 Clinical Education I-V – seminars
  associated with each clinical course
• HCMG 300 Health Care Organization and Services – three credits

6. Visual and performing arts
• Elective – one credit

7. Humanities and social sciences
• PSYC 101 Introduction to Psychology – four credits
• Humanities elective – three credits

Academic regulations
To continue in the respective program, the student is expected to:
• Maintain a minimum semester GPA and cumulative GPA of 2.0.
• Obtain a passing grade in all required courses and a “C” or better in all
  professional courses indicated with an asterisk in the curriculum outline.
• Demonstrate the attitude and skills necessary to function as a professional in
  the selected area of concentration as assessed by academic and clinical
  faculty.

Nuclear medicine technology concentration
Sophomore year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM and CHEZ 101 General Chemistry and Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>CLRS 203 Pathophysiology I</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 205 Exploring Radiation Sciences</td>
<td>1</td>
</tr>
<tr>
<td>CLRS 208 Foundations of Patient Care*</td>
<td>4</td>
</tr>
<tr>
<td>HCMG 300 Health Care Organization and Services</td>
<td>3</td>
</tr>
<tr>
<td>HPEX 250 Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Sophomore year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM and CHEZ 102 General Chemistry and Laboratory II</td>
<td>4</td>
</tr>
<tr>
<td>CLRS 204 Pathophysiology II</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 232 Radiation Safety*</td>
<td>2</td>
</tr>
<tr>
<td>STAT 210 Basic Practice of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Restricted elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15</td>
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</tbody>
</table>

Summer I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLRS 303 Orientation to Nuclear Medicine*</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Junior year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLRS 206 Cross-sectional Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 317 Nuclear Medicine Procedures I*</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 321 Nuclear Medicine Physics and Instrumentation I*</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 321 Nuclear Medicine Physics and Instrumentation Laboratory I*</td>
<td>1</td>
</tr>
<tr>
<td>CLRS 341 Radiation Physics*</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 390 Research Methods in the Radiation Sciences</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 393 Clinical Education I*</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Junior year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLRS 318 Nuclear Medicine Procedures II*</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 322 Nuclear Medicine Physics and Instrumentation II*</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 322 Nuclear Medicine Physics and Instrumentation Laboratory II*</td>
<td>1</td>
</tr>
<tr>
<td>CLRS 394 Clinical Education II*</td>
<td>4</td>
</tr>
<tr>
<td>CLRS 398 Introduction to Research</td>
<td>1</td>
</tr>
<tr>
<td>Restricted elective</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Summer II

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLRS 319 Nuclear Medicine Procedures III*</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 395 Clinical Education III* (32 hours/week for 10 weeks)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>8</td>
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</tbody>
</table>

Senior year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLRS 408 Introduction to Computed Tomography</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 417 Nuclear Medicine Procedures IV*</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 461 Radiopharmaceutical: Preparation and Quality Control*</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 461 Radiopharmaceutical Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CLRS 493 Clinical Education IV*</td>
<td>5</td>
</tr>
<tr>
<td>CLRS 498 Senior Project</td>
<td>2</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>

Senior year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLRS 430 Radiobiology*</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 453 Quality Management in Nuclear Medicine*</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 407 Introduction to PET/CT</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 488 Senior Seminar</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 494 Clinical Education V*</td>
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</tr>
<tr>
<td>Electives</td>
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</tr>
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</table>

* C is the lowest passing grade.

Radiation therapy concentration

Sophomore year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLRS 203 Pathophysiology I</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 205 Exploring Radiation Sciences</td>
<td>1</td>
</tr>
<tr>
<td>CLRS 208 Foundations of Patient Care*</td>
<td>4</td>
</tr>
<tr>
<td>HCMG 300 Health Care Organization and Services</td>
<td>3</td>
</tr>
<tr>
<td>HPEX 250 Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>STAT 210 Basic Practice of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>1</td>
</tr>
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<td></td>
<td>16</td>
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</table>

Sophomore year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLRS 204 Pathophysiology II</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 206 Cross-sectional Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 222 Radiation Safety*</td>
<td>2</td>
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<tr>
<td>Electives</td>
<td>9</td>
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<td></td>
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</table>

Summer I

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CLRS 305 Orientation to Radiation Therapy*</td>
<td>2</td>
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</table>
### Junior year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CLRS 309 Oncologic Patient Care*</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 323 Radiation Therapy, Techniques and Applications*</td>
<td>4</td>
</tr>
<tr>
<td>CLRS 341 Radiation Physics</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 390 Research Methods in the Radiation Sciences</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 393 Clinical Education I*</td>
<td>4</td>
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<tr>
<td>Electives</td>
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**Total Credits: 16**

### Junior year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CLRS 314 Pathology and Treatment Principles I*</td>
<td>4</td>
</tr>
<tr>
<td>CLRS 342 Physics for Radiation Therapy*</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 394 Clinical Education II*</td>
<td>4</td>
</tr>
<tr>
<td>CLRS 398 Introduction to Research</td>
<td>1</td>
</tr>
<tr>
<td>Restricted elective</td>
<td>3</td>
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</tbody>
</table>

**Total Credits: 15**

### Summer I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLRS 212 Radiographic Procedures II*</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 295 Introduction to Clinical Education II*</td>
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</table>

**Total Credits: 15**

### Junior year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CLRS 312 Radiographic Procedures III*</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 320 Radiographic Imaging and Exposure II*</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 341 Radiation Physics</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 390 Research Methods in the Radiation Sciences</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 393 Clinical Education I*</td>
<td>5</td>
</tr>
<tr>
<td>Elective</td>
<td>1</td>
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</tbody>
</table>

**Total Credits: 15**

### Junior year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CLRS 331 Radiographic Imaging Equipment*</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 332 Radiographic Pathology</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 394 Clinical Education II*</td>
<td>4</td>
</tr>
<tr>
<td>CLRS 398 Introduction to Research</td>
<td>1</td>
</tr>
<tr>
<td>Restricted elective</td>
<td>3</td>
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<tr>
<td>Elective</td>
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**Total Credits: 15**

### Summer II

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>CLRS 395 Clinical Education III*</td>
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**Total Credits: 6**

### Senior year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CLRS 408 Introduction to Computed Tomography (CT)</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 415 Pathology and Treatment Principles II*</td>
<td>4</td>
</tr>
<tr>
<td>CLRS 455 Quality Management in Radiation Therapy*</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 493 Clinical Education IV*</td>
<td>5</td>
</tr>
<tr>
<td>CLRS 498 Senior Project</td>
<td>2</td>
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**Total Credits: 15**

### Senior year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CLRS 412 Radiation Therapy Treatment Planning</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 430 Radiobiology*</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 488 Senior Seminar</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 494 Clinical Education V*</td>
<td>5</td>
</tr>
<tr>
<td>Restricted electives</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits: 16**

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### Radiography concentration

#### Sophomore year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLRS 203 Pathophysiology I</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 205 Exploring Radiation Sciences</td>
<td>1</td>
</tr>
<tr>
<td>CLRS 206 Cross-sectional Anatomy*</td>
<td>2</td>
</tr>
<tr>
<td>CLRS 208 Foundations of Patient Care*</td>
<td>4</td>
</tr>
<tr>
<td>HPEX 250 Medical terminology</td>
<td>1</td>
</tr>
<tr>
<td>STAT 210 Basic Practice of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>General elective</td>
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**Total Credits: 16**

#### Sophomore year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CLRS 201 Radiographic Imaging and Exposure I*</td>
<td>3</td>
</tr>
<tr>
<td>CLRZ 201 Radiographic Imaging and Exposure I Laboratory*</td>
<td>1</td>
</tr>
<tr>
<td>CLRS 204 Pathophysiology II</td>
<td>3</td>
</tr>
<tr>
<td>CLRS 211 Radiographic Procedures I*</td>
<td>4</td>
</tr>
<tr>
<td>CLRS 232 Radiation Safety*</td>
<td>2</td>
</tr>
</tbody>
</table>

* C is the lowest passing grade.
The School of the Arts offers 25 degree programs and comprises more than 3,000 students. With the inclusion of our campus in Qatar come an additional four programs. It all began as one night class taught by Theresa Pollak in the fall of 1928.

The school strives to be a stimulating community of students and teachers who cross the boundaries of conventional art and design disciplines, apply aesthetic and intellectual vision to the expression of complex ideas, value artistic tradition and experimentation in the search for creative solutions, connect international experience with professional education, integrate technical skills with theoretical understanding and care about the impact of their work on people.

Administration
325 North Harrison Street
P.O. Box 842519
Richmond, Virginia 23284-2519
(804) 828-2787
Fax: (804) 828-6469
www.vcu.edu/arts
Joseph Seipel
Dean
Allyson Vanstone
Dean for VCU-Qatar
John Guthmiller
Associate Dean
Christina Lindholm
Associate Dean for Undergraduate Studies
John Risley
Associate Dean for Academic Affairs
Susan King Roth
Senior Associate Dean
Nancy M. Scott
Associate Dean for Academic Administration

Accreditation
VCU School of the Arts is accredited by the National Association of Schools of Art and Design, the National Association of Schools of Dance, the National Association of Schools of Music, and the National Association of Schools of Theatre.

Visual arts
Visual arts degree programs: art education, art history, communication arts, craft and material studies, fashion (design and fashion merchandising), film (cinema), graphic design, interior design, kinetic imaging, painting and printmaking, and sculpture
National Association of Schools of Art and Design
Art education (bachelor’s and master’s degrees)
National Association of Schools of Art and Design, National Council for Accreditation for Teacher Education, Virginia Department of Education
Interior design (bachelor’s degree)
National Association of Schools of Art and Design, Council for Interior Design Accreditation

Performing arts
Dance and choreography (bachelor’s degree)
National Association of Schools of Dance
Music (bachelor’s and master’s degrees)
National Association of Schools of Music
• Music education concentrations (bachelor’s and master’s degrees)
National Council for Accreditation National Association of Schools of Music, for Teacher Education, Virginia Department of Education
Theatre (bachelor’s and master’s degrees)

The School of the Arts offers degrees in the following areas of study:

Art Education
• Bachelor of Fine Arts
• Master of Art Education

Art History
• Bachelor of Arts
• Master of Arts
• Doctor of Philosophy

Communication Arts
• Bachelor of Fine Arts

Craft and Material Studies
• Bachelor of Fine Arts
• See Fine Arts concentrations

Dance and Choreography
• Bachelor of Fine Arts

Design
• Master of Fine Arts (with concentrations in interior environments and visual communications)

Fashion
• Bachelor of Arts
• Bachelor of Fine Arts

Film
• Bachelor of Arts

Fine Arts
• Master of Fine Arts (with concentrations in ceramics, fibers, furniture design, glassworking and jewelry/metalworking; kinetic imaging; painting or printmaking; photography and film; sculpture)

Graphic Design
• Bachelor of Fine Arts

Interior Design
• Bachelor of Fine Arts

Kinetic Imaging
• Bachelor of Fine Arts
• See Fine Arts

Music
• Bachelor of Arts
• Bachelor of Music
• Master of Music

Painting and Printmaking
• Bachelor of Fine Arts
• See Fine Arts

Photography and Film
• Bachelor of Fine Arts
• See Fine Arts

Sculpture
• Bachelor of Fine Arts
• See Fine Arts

Theatre
• Bachelor of Arts
• Bachelor of Fine Arts
• Master of Fine Arts

Programs
Undergraduate Bulletin 2012-13
## School of the Arts Visual Resource Center

Virginia Commonwealth University’s Cabell Library houses an extensive collection of books, publications and magazines on the visual and performing arts. VCU subscribes to ARTstor, the largest online image bank for the arts.

VCU is a short distance from Washington, D.C., Baltimore, Philadelphia and New York and the museums, libraries and research facilities in those urban areas.

## Undergraduate information

### General information

Students who have matriculated in a professional curriculum receive enrollment preference for courses in their program. However, unless otherwise indicated, all courses are open to any student in the university.

Because of the sequence in which course work is arranged, only transfer students will be considered for mid-year admission. With the exception of art history classes, all courses must be taken in their numerical sequence unless approved by the chair of the department in which they are listed.

In many of the courses, a considerable amount of work is done outside the classroom. This work is done in addition to the work done in the scheduled classes. Students are required to attend. Departments within the school reserve the right to retain examples of student work for permanent collections.

Before enrollment, students should contact the appropriate department chair for a more detailed curriculum outline than that which appears in this bulletin.

### Academic requirements

#### Special charges

- Internships and cooperative education
- Transfer students
- Undergraduate credit by examination
- 500-level courses

#### Academic requirements

All majors in the School of the Arts must earn a minimum GPA of 2.0 in their major concentration as well as the overall GPA in order to meet the university requirements for graduation.

The department and the student’s adviser periodically evaluate the record of each student. If at any time during undergraduate studies the department faculty concludes a student is not demonstrating adequate progress in the area of concentration, the student will be advised to withdraw from that department.

Some degree programs stipulate minimum GPA requirements in the major concentration higher than 2.0 and other special reviews to determine satisfactory progress in their programs. Students are advised to refer to the individual department sections in this bulletin detailing prerequisites (i.e. portfolio reviews, juries, recitals, progress review, etc.) that govern admission to advanced-level study.

Student participation in both credit- and noncredit-bearing department activities may be required. Students matriculating in School of the Arts degree programs are bound by the policies and procedures stipulated in this bulletin and in other current departmental student handbooks or policy documents of the school’s academic departments in which students are registered for courses.

#### Special charges

All full-time majors enrolled in the School of the Arts are charged a comprehensive fee each semester. The fee schedule is available on the Financial Aid Web site at [www.vcu.edu/enroll/sa/tuition](http://www.vcu.edu/enroll/sa/tuition). The fees are prorated to the individual departments that determine the expenditures, resulting in a rebate to the students through materials, services and/or equipment, and may include models, field trips or special lectures. Students enrolled in any of the numerous courses that require an additional outlay for materials will be billed for those individual fees by the Student Accounting Department.

### Internships and cooperative education

The School of the Arts encourages qualified students to enter into limited and carefully selected internship arrangements. To assist students, departments and programs are encouraged to identify, evaluate and select internship arrangements that will expand and complement the scope of the student’s educational experience, as well as support the missions of the university, school, and department or program.

Internship arrangements are coordinated by the individual department or program and are considered university-supported activities involving enrolled students and faculty. Participants in such arrangements are subject to all applicable university policies and procedures. These policies and procedures include, but are not limited to, conflict of interest, intellectual properties, faculty rights and responsibilities, and those policies and procedures outlined in the VCU Insider Student Handbook and Resource Guide.

While the School of the Arts encourages student internship arrangements, it disallows student internship arrangements when family members serve in a supervisory capacity. Should such an internship arrangement become an option, the approval of the dean must be received prior to completing any final agreement.

The School of the Arts also participates in the Cooperative Education Program. Qualifying students can take part in this program through most departments. A full description of the program appears in the “Division of Student Affairs and Enrollment Services” section of this bulletin.

### Transfer students

Departmental faculty committees determine placement in all upper-level courses after evaluating the student’s record, performance, audition and/or creative work. The student should contact the appropriate department chair at the time of acceptance to arrange for this evaluation before actual enrollment.

### Undergraduate credit by examination

Recognizing that VCU enrolls students of varying backgrounds and experiences, the School of the Arts provides its students the opportunity to accelerate their education through “credit by examination.” The conditions under which credit by examination may be given as well as the procedures are outlined in the “Admission to the University” section of this bulletin.

### 500-level courses

500-level courses are available only to upper-division undergraduate students with the approval of the chair of the department in which the course is offered.

### Arts honors

Undergraduate arts majors may earn arts honors. A student must be enrolled in The Honors College and a major within the School of the Arts. To earn arts honors, students must complete 15 credits of arts honors courses and a senior capstone course or experience (this varies with each major).

Current honors course offerings, including arts honors courses are listed at: [https://www.pubapps.vcu.edu/honors/academics/courses/index.aspx](https://www.pubapps.vcu.edu/honors/academics/courses/index.aspx)

Arts honors graduates will be recognized at Commencement with special regalia, and the distinction is noted on the transcript. Inquiries should be directed to Jody Symula, director of student services. Please e-mail jlsymula@vcu.edu for an advising appointment.

### Art Foundation Program

#### Elissa Armstrong

Associate Director

[www.vcu.edu/arts/artfoundation](http://www.vcu.edu/arts/artfoundation)

The mission of the Art Foundation Program is to provide an intellectually rigorous, studio-based experience in the fundamental issues of art and design. The program seeks to develop in its students an enthusiasm for their work, a means to reflect analytically and an ability to cultivate skills that will serve throughout their education. The Art Foundation Program seeks to establish connections between programs in art and design and to participate in a larger forum of ideas and concepts relevant to all of the disciplines.

Completion of the Art Foundation Program is a prerequisite for entry into all fine art and design departments: Art Education, Communication Arts, Craft and Material Studies, Fashion Design, Graphic Design, Interior Design, Kinetic Imaging, Painting and Printmaking, Photography and Film, and Sculpture and Extended Media. Art Foundation provides the basic concepts, skills and experience necessary to pursue advanced studio work in each department.

Students become affiliated with a major department after the departmental...
portray potential in their chosen area.

Transfer students in art and design are also required to complete the Art Foundation Program but may be awarded transfer credits based on a case-by-case basis.

Art Foundation Program components

<table>
<thead>
<tr>
<th>Component</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Art Foundation studios</td>
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<tr>
<td>Art history</td>
<td>6</td>
</tr>
<tr>
<td><strong>University core/general education course</strong></td>
<td><strong>12</strong></td>
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Suggested Art Foundation Program curriculum

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Fall semester</strong></td>
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<tr>
<td>ARTF 131 Drawing Studio</td>
<td>3</td>
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<tr>
<td>ARTF 132 Surface Research</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 139 Project</td>
<td>1</td>
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<tr>
<td>ARTH 103 Survey of Western Art</td>
<td>3</td>
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<tr>
<td>UNIV 111 Focused Inquiry I</td>
<td>3</td>
</tr>
<tr>
<td><strong>University core or general education course</strong></td>
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<tr>
<td>Total</td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Spring semester</strong></td>
<td></td>
</tr>
<tr>
<td>ARTF 133 Space Research</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 134 Time Studio</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 139 Project</td>
<td>1</td>
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<tr>
<td>ARTH 104 Survey of Western Art</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry II</td>
<td>3</td>
</tr>
<tr>
<td><strong>University core or general education course</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>Total</td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Art foundation courses

Descriptions for all courses offered by the university may be accessed through the online courses database at [www.pubapps.vcu.edu/vcucourses](http://www.pubapps.vcu.edu/vcucourses). You may search by unit, subject or keyword, as well as by degree level.

Follow this link to art foundation (ARTF) courses.

Cinema Program

Robert Tregenza
Director

The Cinema Program in the School of the Arts offers the Bachelor of Arts in Film, a degree that focuses on narrative feature and short films. The program prepares students for the art and craft of narrative filmmaking — particularly of independent narrative film — and is ideally supported with an undergraduate liberal arts education introducing students to a broad range of knowledge. Students in the program are encouraged to pursue a second major from VCU’s College of Humanities and Sciences, the School of Business or other fields.

Students are admitted directly into the program and are not required to complete the Art Foundation Program. Majors can graduate after only three years of study, including two intensive summer semesters. Faculty members include professional filmmakers and courses utilize high-end digital equipment and motion picture technology.

Cinema courses

Descriptions for all courses offered by the university may be accessed through the online courses database at [www.pubapps.vcu.edu/vcucourses](http://www.pubapps.vcu.edu/vcucourses). You may search by unit, subject or keyword, as well as by degree level.

Follow this link to cinema (CINE) courses.

Film, Bachelor of Arts (B.A.)

Robert Tregenza
Program Head

www.vcu.edu/arts/cinema

The Bachelor of Arts in Film is designed for students who desire a program with an emphasis in film combined with a strong liberal arts component with a second undergraduate major or double minor in fields of study other than the arts. The program focuses on the art and craft of narrative filmmaking with an emphasis on the practices of U.S. independent filmmakers. The style and content of U.S. independent film are often closely aligned with European cinema and the program offers opportunities for international study options. Internships with professional film organizations in the U.S. and abroad are available on a competitive basis.

Full-time students enrolled in this program may graduate with the B.A. after three years of study by completing required course work in the summer semester following the third year.

Filmmaking courses in the program, which comprise approximately one-third of the curriculum, focus on the understanding and creative use of digital film equipment. Students interested in both digital and traditional celluloid film and documentary, as well as narrative techniques, should review the school’s Bachelor of Fine Arts program in photography and film, which offers nearly two-thirds of the curriculum in film courses. Students interested in animation or experimental video should review the B.F.A. in Kinetic Imaging program.

Majors in the Cinema Program are required to complete a second major or double minor within the College of Humanities and Sciences. Students must also maintain a minimum cumulative GPA of 2.5 in the program. Students’ grades will be reviewed at midterm and at the end of each semester for the first three semesters. After completion of three semesters, portfolios and course evaluations, as well as GPAs, are reviewed to determine if the student may continue in the program.

The B.A. in Film requires a minimum of 120 credits, including 48 in the major. At least 45 of the 120 credits must be taken as 300- to 500-level courses.

Curriculum

<table>
<thead>
<tr>
<th>Year, semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First year, fall semester</strong></td>
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<tr>
<td>ARTH 270 History of the Motion Picture</td>
<td>3</td>
</tr>
<tr>
<td>CINE 101 Visual Storytelling</td>
<td>2</td>
</tr>
<tr>
<td>UNIV 111 Focused Inquiry I</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/fine arts (university core)</td>
<td>3</td>
</tr>
<tr>
<td>Approved quantitative literacy (university core)</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td><strong>14</strong></td>
</tr>
<tr>
<td><strong>First year, spring semester</strong></td>
<td></td>
</tr>
<tr>
<td>ARTH 271 History of the Motion Picture</td>
<td>3</td>
</tr>
<tr>
<td>CINE 101 Visual Storytelling</td>
<td>2</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry I</td>
<td>3</td>
</tr>
<tr>
<td>Approved natural/physical science (university core)</td>
<td>3</td>
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<tr>
<td><strong>Second major course</strong></td>
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</tr>
<tr>
<td><strong>Summer semester</strong></td>
<td></td>
</tr>
<tr>
<td>Summer international study abroad (optional)*</td>
<td>(1-5)</td>
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<tr>
<td><strong>Second year, fall semester</strong></td>
<td></td>
</tr>
<tr>
<td>CINE 200 Cinema Form and Concept I</td>
<td>2</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric or equivalent (university core)</td>
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<tr>
<td>Approved social/behavioral science (university core)</td>
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<tr>
<td>General studies elective</td>
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<tr>
<td><strong>Second major course</strong></td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
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<tr>
<td><strong>Second year, spring semester</strong></td>
<td></td>
</tr>
<tr>
<td>CINE 201 Cinema Form and Concept II</td>
<td>2</td>
</tr>
<tr>
<td>General studies electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Second major courses</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>
Summer studio (8 weeks)
CINE 390 Digital Camera Production Intensive I 15

Third year, fall semester
CINE 300 Cinema Form and Concept III 2
CINE 493 Film Internship (optional elective) 3
Second major courses 9 14

Third year, spring semester
CINE 301 Cinema Form and Concept IV 2
Second major courses and/or electives 15 17

Summer studio (8 weeks)
CINE 490 Digital Camera Production Intensive II 15

Total credits 120

* Cannes Film Festival (optional elective, 1-5 credits) is recommended 15-day study abroad option offered annually during the last two weeks in May through VCU’s Office of International Education.

Department of Art Education

The Department of Art Education supports instruction in art that encourages the construction of meaning. Faculty and students are actively involved with the art world, education and local and global communities through art-based service-learning, visual culture studies, critical thinking, exhibition, assessment, curriculum, critical theory and emerging digital technologies (virtual and interactive).

The department emphasizes interdisciplinary connections throughout the School of the Arts and the university as a whole. Through their own research and instruction, art teacher candidates engage their students and themselves in traditional and nontraditional forms of inquiry to contribute to the continuing growth and strength of the profession.

Administration
Sara Wilson McKay
Associate Professor and Interim Department Chair
www.vcu.edu/arts/arteducation

Art education courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to art education (ARTE) courses.

Art Education, Bachelor of Fine Arts (B.F.A.)

The Art Education Program is an approved teacher preparation program that complies with the professional standards of the Virginia Department of Education and the Southern Association of Colleges and Schools. It is further accredited by the National Council for Accreditation of Teacher Education and the National Association of Schools of Art and Design. All of these agencies assure the highest professional program standards. Graduates of the program are eligible for Virginia teacher license to teach art in pre-kindergarten through grade 12.

Admission
Accepted students
Degree requirements for B.F.A. in Art Education
Art education policy of reasonable progress
Course failures and withdrawals

Cautionary status
Pre-teacher preparation
Teacher Preparation Program
Second-year review
Clinical internship
Application for graduation
Teacher licensure

Admission

Undergraduate students admitted to the School of the Arts who have successfully completed the Art Foundation Program (or the equivalent at another institution) are eligible to apply through the Department of Art Education to enter the program.

Transfer students and students currently attending VCU must have a minimum cumulative GPA of 2.0 to be considered for departmental admission; however, there is a higher cumulative GPA requirement of 2.8 for departmental admission to teacher preparation (see below for more information).

Accepted students

Accepted students are required to attend an orientation session with an academic adviser from the Department of Art Education. Transfer students, second-degree-seeking students, double majors and change of major students are required to meet with the administrative director prior to beginning course work in the department.

The name and contact information of academic advisers may be obtained from the Department of Art Education.

Degree requirements for B.F.A. in Art Education

General studies (30 credits) Credits

University core
UNIV 111 Focused Inquiry I 3
UNIV 112 Focused Inquiry II 3
UNIV 200 Writing and Rhetoric or equivalent 3
Approved humanities/fine arts 3
Approved natural/physical science 3
Approved quantitative literacy 3
Approved social/behavioral science 3
Additional requirements
EDUS 301 Human Development and Learning 3
History (non-western) 3
Literature 3

Professional education (24 credits)

ARTE 401 Art Education Elementary Materials and Practicum 4
ARTE 402 Art Education Secondary Materials and Practicum 4
ARTE 404 Clinical Internship Seminar 1
TEDU 330 Survey of Special Education or ARTE 450 Art for the Exceptional Student 3
TEDU 485 Directed Student Teaching I (art education) 6
TEDU 486 Directed Student Teaching II (art education) 6

Studies in art and design (66 credits)

Art Foundation studios 14
Studio courses 30
ARTE 250 Computer Technology in Art Education (3)
ARTE 310 Foundations of Art Education (3)
ARTE 311 Art Education Curriculum and Instructional Procedures (3)
ARTE 408 Two-dimensional Art Experiences or studio elective (PAPR, PHTO) (3-4)
ARTE 409 Three-dimensional Art Experiences or studio elective (SCPT, CRAFT) (3-4)
CRAFT 240 Introduction to Ceramics (4)
PAPR 205 Painting, Basic (4)
PHTO 491 Topics in Photography and Film or ARTE 407 Photography in Art Education (3)
SCPT 211 Basic Sculpture I (4)

Art history 15

ARTH 103 Survey of Western Art (3)
ARTH 104 Survey of Western Art (3)
ARTH elective: 300- or 400-level (3)
Successful completion of ARTE 310 and 311 (6 credits)
Minimum of 3.0 GPA in art education courses and no grade lower than a C
No record of a felony conviction
Passing scores on the Virginia Communication and Literacy Assessment
Passing scores on the Praxis II: Art Content Knowledge exam
Submission of completed departmental Application for Teacher Preparation
Successful second-year review

Departmental admission to the Teacher Preparation Program is required for enrollment in practicum courses (ARTE 401 and 402) and clinical internship (ARTE 404, TEDU 485 and 486).

Second-year review
A review of student work, GPA and dispositions takes place at the completion of ARTE 311. Reviews are rated “satisfactory,” “unsatisfactory” or “provisional.” The student must receive a satisfactory or provisional evaluation from the faculty to continue in the program. Students who receive provisional approval will be reviewed by the chair after each practicum to determine continuation in the program.

Students must register for and take the required Praxis II: Art Content Knowledge exam (www.ets.org) before they apply for clinical internship (student teaching).

During teacher preparation, students will continue to complete required art history, studio and general studies course work.

Note: ARTE 401 is a prerequisite of ARTE 402. Enrollment is granted to ARTE 401 and ARTE 402 through an override form from the Department of Art Education.

Clinical internship
All students are required to complete a full semester of clinical internship (student teaching). Students must complete and submit an application to clinical internship by the established deadline in order to be eligible. If students do not complete their applications on time, including submission of official copies of passing score reports, they will not be guaranteed acceptance into clinical internship. Students are granted provisional acceptance to student teaching pending successful faculty practicum review.

Requirements for clinical internship:
• Departmental admission into the Teacher Preparation Program
• Submission of completed departmental application for clinical internship by established deadline
• Successful completion of all other required course work
• Minimum of 2.8 cumulative GPA
• Minimum of 3.0 GPA in art education courses and no grade lower than a C
• Passing scores on the Praxis I or exemption with SAT or ACT scores
• Passing scores on the Virginia Communication and Literacy Assessment
• Passing scores on the Praxis II: Art Content Knowledge exam
• Submission of certificate of successful completion of online Child Abuse Prevention training
• Proof of tuberculosis screening, dated no more than one year prior to the expected date of completion of clinical internship
• Successful faculty practicum review

All interns must attend the departmental orientation as well as a School of Education orientation prior to beginning their internship.

Students are placed by the School of Education in an elementary (TEDU 485) and a secondary (TEDU 486) placement for eight weeks each, during their semester of clinical internship.

ARTE 404 Clinical Internship Seminar is taken in conjunction with TEDU 485 and 486. This is the only course students are permitted to take while student teaching.

All students are assigned a university supervisor to act as a liaison for the Department of Art Education and a cooperating teacher at each school.

Application for graduation
During their final semester, students will apply for graduation from the university. In order to graduate, students must successfully complete all required courses (120 credits with at least 45 upper-level credits).

Teacher licensure
Upon completion of the Bachelor of Fine Arts degree program in art education and with the recommendation of the Department of Art Education and School of Education, students are eligible to apply for initial teacher licensure from the Virginia Department of Education.

Department of Art History

The Department of Art History offers programs that acquaint students with the humanistic discipline of art historical inquiry. While providing students with the opportunity for a broad education drawing on the liberal arts and humanities, the department also emphasizes a close bond with the studio and performing arts and enjoys a close relationship with the other departments in the School of the Arts.

The department offers a broad-based education in the humanistic discipline of art history at the baccalaureate, master’s and doctoral levels.

Overseas studies are available through university-sponsored programs abroad in Europe and Asia. Graduate assistantships and fellowships are available to full-time graduate students.

Administration

Michael Schreffler
Associate Professor and Department Chair

www.vcu.edu/arts/arthistory

Art history courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject, or keyword, as well as by degree level.

Follow this link to art history (ARTH) courses.

Art History, Bachelor of Arts (B.A.)

Recognizing the diverse interests of undergraduate students and the varied practical applications of art history, the department offers its majors a choice between two curricula culminating in the Bachelor of Arts degree. The B.A. degree focuses on academic disciplines in the liberal arts. Art history majors must earn a minimum grade of C in each ARTH course to be applied to the curriculum requirements.

The art historical curriculum is a liberal arts program composed of an academic course of study exposing the student to the scholarship, theoretical perspectives and research methods of not only the history of art, but related disciplines in the humanities. Courses focus on cultures, historical periods and regions. The program also includes possibilities for directed research projects as well as museum internships. This curriculum provides students the best possible background for future graduate work in art history.

The architectural history curriculum, with strong liberal arts and studio components, is a comprehensive architectural history program that emphasizes the study of both Western and non-Western architecture. This program affords the student an excellent background for graduate work in architectural history and/or art history, as well as career opportunities in the field. Given the region’s rich and diverse architectural resources, this program provides an unusual opportunity for on-site studies. By providing the student with additional studio training in art history, such as architectural presentation graphics and urban studies and planning, this program offers a well-rounded knowledge of architectural history.

Additional application requirements

For students applying for admission in spring 2011 and beyond, in addition to the requirements for application to the School of the Arts, applicants to the art history program must submit as a writing sample a research paper in the humanities not to exceed 20 pages. For additional information please see the department’s Web site at www.vcu.edu/arts/arthistory/dept.

Degree requirements for art historical track

<table>
<thead>
<tr>
<th>University core requirements (21 credits)</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIV 111 Focused Inquiry I</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry II</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/fine arts</td>
<td>3</td>
</tr>
</tbody>
</table>

Approved natural/physical sciences     3
Approved quantitative literacy         3
Approved social/behavioral sciences    3

Additional requirements

Select credits from the following subject areas: ANTH, GEOG, HIST or RELS

Program requirements (27 credits)

ENGL 215 Textual Analysis               3
FREN, ITAL, SPAN or GRMN 202 (intermediate readings) 3
Fine arts studio (CRAF, SCPT, PAPR or PHTO) 6
HIST (any)                               12
HIST 300-level                           3

Major requirements (42 credits)

ARTH 103, 104 Survey of Western Art     6
ARTH 200-500-level                      30
ARTH 390 Art Historical Methods or PHIL 421 Aesthetics 3
ARTH 490, 493 or 497 (capstone)         3

Open VCU electives (21 credits)         21

Total                                   120

Degree requirements for architectural history track

<table>
<thead>
<tr>
<th>University core requirements (21 credits)</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIV 111 Focused Inquiry I</td>
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<tr>
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<td>3</td>
</tr>
<tr>
<td>Approved humanities/fine arts</td>
<td>3</td>
</tr>
</tbody>
</table>

Approved natural/physical sciences     3
Approved quantitative literacy         3
Approved social/behavioral sciences    3

Additional requirements

Select credits from the following subject areas: ANTH, GEOG, HIST or RELS

Program requirements (29 credits)

ENGL 215 Textual Analysis               3
FREN, ITAL, SPAN or GRMN 202 (intermediate readings) 3
Fine arts studio (CRAF, SCPT, PAPR or PHTO) 6
HIST (any)                               12
HIST 300-level                           3

Major requirements (42 credits)

ARTH 103, 104 Survey of Western Art     6
ARTH 200-500-level                      30
ARTH 390 Art Historical Methods or PHIL 421 Aesthetics 3
ARTH 490, 493 or 497 (capstone)         3

Open VCU electives (19 credits)         19

Total                                   120

Art history, minor in

A minor in art history consists of 18 credits in art history. These credits must include either six in the survey of Western art or eight in the survey of world art, plus 12 credits in four additional period courses. The student must select one course each from the following categories: (1) classical, (2) medieval, (3) Renaissance, (4) Baroque/18th century, (5) 19th and 20th century and (6) non-Western.

Department of Communication Arts

<table>
<thead>
<tr>
<th>Department of Communication Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>James B. Miller</td>
</tr>
<tr>
<td>Professor and Department Chair</td>
</tr>
<tr>
<td><a href="http://www.vcu.edu/arts/communicationarts">www.vcu.edu/arts/communicationarts</a></td>
</tr>
</tbody>
</table>
Communication arts is the study and exploration of the qualities, disciplines and technologies that enable us to create and communicate with insight and vision. Our studies are firmly rooted in understanding the power of image and art to communicate.

Communication arts includes studies in:

- Drawing, which is the fundamental means to articulate ideas; it is elemental to everything we do.
- Illustration, a discipline with a rich history in drawing, painting, design and print media, which is being expanded by powerful new tools and technologies.
- Visual studies, which encompasses studio, historical, conceptual and theoretical issues that include analysis and exploration of image, media, content and context.

Study leads to a Bachelor of Fine Arts and students may choose an emphasis in either communication arts or scientific and preparatory medical illustration.

### Communication arts courses

Descriptions for all courses offered by the university may be accessed through the online courses database at [www.pubapps.vcu.edu/vcucourses](http://www.pubapps.vcu.edu/vcucourses). You may search by unit, subject or keyword, as well as by degree level.

Follow this link to communication arts (COAR) courses.

#### Communication Arts, Bachelor of Fine Arts (B.F.A.)

The curriculum in the sophomore year builds a strong foundation for communication arts majors, with courses in communication theory, visual communications history, the figure, traditional drawing and painting media, typography, and basic communication arts software. The junior year concentrates on the specifics of concept development, photography, sequencing and traditional and digital illustration projects. The senior year offers the opportunity for students to select from a variety of interest areas within the major, including imagery for children, art direction, image and movement, and Web page design. All senior students are required to take a course in business practice and ethics and complete a comprehensive portfolio project.

Communication arts student portfolios and GPAs are reviewed at the end of the sophomore and junior years to determine if the student may continue in the program. The student should present a portfolio that demonstrates, at a minimum, evidence of sufficient progress, competence and potential. In addition, a cumulative GPA of 2.5 in the major is expected for continuance in the program. In order to take a course, students must pass all required prerequisite courses with a minimum grade of a C.

### Degree requirements for Bachelor of Fine Arts in Communication Arts

#### Communication arts curriculum

<table>
<thead>
<tr>
<th>University core requirements</th>
<th>Credits</th>
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<td>UNIV 111 Focused Inquiry I</td>
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<tr>
<td>UNIV 112 Focused Inquiry II</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric Workshop</td>
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<tr>
<td>Approved humanities/fine arts</td>
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<tr>
<td>Approved natural/physical sciences</td>
<td>3</td>
</tr>
<tr>
<td>Approved quantitative literacy</td>
<td>3</td>
</tr>
<tr>
<td>Approved social/behavioral sciences</td>
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</table>

<table>
<thead>
<tr>
<th>Additional requirements</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Courses in humanities/fine arts, natural/physical sciences, social/behavioral sciences</td>
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</tbody>
</table>

#### Supportive credits

| ARTF 131 Drawing Studio | 3 |
| ARTF 132 Surface Research | 3 |
| ARTF 133 Space Research  | 3 |
| ARTF 134 Time Studio     | 3 |
| ARTF 139 Project         | 2 |
| COAR 231 Basic Communication Arts Software | 3 |
| COAR 450 Business of Communication Arts | 3 |
| VCU arts electives – upper division | 6 |

### Art history

| ARTH 103 Survey of Western Art | 3 |
| ARTH 104 Survey of Western Art | 3 |
| COAR 352 History of Visual Communications I | 3 |
| COAR 353 History of Visual Communications II | 3 |

### Communication arts major requirements

| COAR 200 Visual Studies: Drawing | 3 |
| COAR 201 Drawing Studies: The Figure Observed | 3 |
| COAR 202 Drawing Studies: The Figure in Context | 3 |
| COAR 210 Visual Studies: Design | 3 |
| COAR 211 Fundamentals of Typography | 3 |
| COAR 300 Illustration: Drawing and Painting | 3 |
| COAR 320 Concept Drawing | 3 |
| COAR 321 Sequential Imaging | 3 |
| COAR 331 Photographic Principles in Visual Communications | 3 |
| COAR 332 Digital Drawing | 3 |
| COAR 464 Senior Portfolio | 6 |
| Communication arts electives – upper division | 9 |

### Total credits

| 120 |

### Scientific and preparatory medical illustration curriculum

<table>
<thead>
<tr>
<th>University core requirements</th>
<th>Credits</th>
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<tr>
<td>BIOL and BIOZ 152 Introduction to Biological Science and Laboratory II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 205 Basic Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>CHEM and CHEZ 101 General Chemistry and Laboratory I</td>
<td>4</td>
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<table>
<thead>
<tr>
<th>Supportive credits</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ARTF 131 Drawing Studio</td>
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<tr>
<td>ARTF 132 Surface Research</td>
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<td>ARTF 133 Space Research</td>
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<td>ARTF 134 Time Studio</td>
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<tr>
<td>ARTF 139 Project</td>
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<tr>
<td>COAR 231 Basic Communication Arts Software</td>
<td>3</td>
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<tr>
<td>COAR 450 Business of Communication Arts</td>
<td>3</td>
</tr>
<tr>
<td>PHIS and PHIZ 206 Human Physiology and Laboratory</td>
<td>4</td>
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<tr>
<td>BIOL 218 Cell Biology</td>
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<tr>
<td>BIOL 301 Comparative Vertebrate Anatomy</td>
<td>5</td>
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<tr>
<td>CHEM and CHEZ 102 General Chemistry and Laboratory II</td>
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<table>
<thead>
<tr>
<th>Art history</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ARTH 103 Survey of Western Art</td>
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<tr>
<td>ARTH 104 Survey of Western Art</td>
<td>3</td>
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<tr>
<td>COAR 352 History of Visual Communications I</td>
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<tr>
<td>COAR 353 History of Visual Communications II</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication arts major requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COAR 200 Visual Studies: Drawing</td>
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</tr>
<tr>
<td>COAR 201 Drawing Studies: The Figure Observed</td>
<td>3</td>
</tr>
<tr>
<td>COAR 202 Drawing Studies: The Figure in Context</td>
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</tr>
<tr>
<td>COAR 300 Illustration: Drawing and Painting</td>
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<tr>
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<td>3</td>
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<tr>
<td>COAR 332 Digital Drawing</td>
<td>3</td>
</tr>
<tr>
<td>COAR 464 Senior Portfolio</td>
<td>6</td>
</tr>
<tr>
<td>Communication arts electives – upper division</td>
<td>9</td>
</tr>
</tbody>
</table>

### Total credits

| 124 |
Department of Craft and Material Studies

The Department of Craft and Material Studies is housed in the new Fine Arts Building that includes private and semi-private graduate studios. These new facilities provide a safe and excellent physical environment in which to work. Students have access to well-equipped studios in each of the five media areas along with a computer lab and wood shop. The building also houses the facilities for sculpture, painting and printmaking, and kinetic imaging. Interaction among departments is encouraged.

In addition to the Bachelor of Fine Arts in Craft and Material Studies, the department offers graduate course work leading to the Master of Fine Arts in Fine Arts degree in five disciplines: ceramics, fiber, furniture design, glassworking and jewelry/metalworking.

The M.F.A. is the terminal degree in the studio areas and is a requirement for most university teaching positions. Every effort is made to assist students in gaining valuable teaching experience while they are in the program. The department aids the students financially through a variety of scholarships and graduate assistantships. Opportunities exist for qualified students to teach courses during the academic year and in summer school.

Administration

Sonya Clark
Professor and Department Chair
www.vcu.edu/arts/craft

Craft and material studies courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to craft and material studies (CRAF) courses.

Craft and Material Studies, Bachelor of Fine Arts (B.F.A.)

The Department of Craft and Material Studies offers a professionally oriented program that leads to a Bachelor of Fine Arts in Craft and Material Studies with focus areas in ceramics, fiberwork/fabric design, glassworking, metalsmithing/jewelry or woodworking/furniture design. Within these areas of specialization, courses are designed to assist students in developing concepts, personal direction, and the necessary skills and technical competencies to enable them to pursue a professional career or graduate study. In addition to the areas of study, students have the opportunity for a diverse education in the liberal arts and humanities. Students are encouraged to select courses in other schools on the Monroe Park Campus that will add to their general knowledge. A student may elect a minor area of study in any department or program offering a minor. The minor can be used to fulfill career objectives or to investigate a discipline of secondary interest.

Career opportunities for craft majors include setting up an independent studio or gallery, restoration or repair work, teaching or participating in the Artist-in-Residence programs in the public schools, and consulting and designing for industry.

Degree requirements in craft and material studies

The Bachelor of Fine Arts in Craft and Material Studies requires a minimum of 120 credits, including 47 in the major. A minimum of 45 of the 120 credits must be 300- and/or 400-level courses. To enroll in an advanced-level craft course, majors must have earned a C or better in all courses prerequisite for that course.

<table>
<thead>
<tr>
<th>University core</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIV 111 and 112 Focused Inquiry I and II</td>
<td>6</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/fine arts</td>
<td>3</td>
</tr>
<tr>
<td>Approved natural/physical science</td>
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<tr>
<td>Approved social/behavioral science</td>
<td>3</td>
</tr>
<tr>
<td>Approved quantitative literacy</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General studies</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art history (to include ARTH 103, 104 and 3 credits in a non-Western topic)</td>
<td>15</td>
</tr>
</tbody>
</table>

Craft and material studies, minor in

Successful completion of the Art Foundation Program is a prerequisite for the minor, which consists of a minimum of 18 credits in craft and material studies courses. Of these 18, a minimum of nine credits must be in upper-level courses.

Department of Dance and Choreography

James Frazier
Associate Professor and Department Chair
www.vcu.edu/arts/dance

The mission of the Department of Dance and Choreography is to create an environment where the student experiences the demands and challenges of the professional dancer/choreographer. In a community setting where communication, mutual respect and self-motivation are encouraged, classes provide students with disciplined training that will maximize their potential to become dancers of technical excellence, choreographers with original and powerful voices and thinkers with high academic standards.

Students are trained to be performers, choreographers and teachers in this curriculum, which emphasizes modern dance and offers dance courses in modern, improvisation, composition, choreography, music, and dance forms and dance history, as well as ballet, jazz, tap, hip-hop, ballroom, contact improvisation, dance science, anatomy for dancers, video/choreography and teaching methods for dance. Additionally, the program provides a variety of experiences in performance, choreography and production. These offerings enable students to develop as savvy, expressive artists with professional training in dance technique, knowledge of dance philosophies and a foundation in history, enabling them to function as independent and creative artists in the field of dance. VCU Dance is an accredited member of the National Association of Schools of Dance.

Dance and choreography courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow these links to to dance and choreography (DANC) courses or the DANZ laboratories.

Dance and Choreography, Bachelor of Fine Arts (B.F.A.)

The Bachelor of Fine Arts in Dance and Choreography requires a total of 120 credits, with 90 of those credits as the major core curriculum. Alongside courses outside of the department, dance-focused academics and creative process-oriented classes (i.e. composition and choreography) dance majors are typically required to take two technique classes daily throughout the majority of their studies. The continuous study of modern dance and ballet is a strong component of the curriculum. In addition to modern dance and ballet, elective courses in jazz, tap, hip hop, improvisation, ballroom and other special topics courses are offered, rounding out a curriculum that also involves studies in kinesiology and anatomy, dance history, music, etc. Within the core there are opportunities for repertory experience and for independent study.
The dance major program is rigorous. Students’ technique placement within the required major courses is determined through departmental assessment and placement processes. Formal evaluation procedures include a placement class for entering students, juried examinations at the end of the first semester of the freshman and sophomore years and every semester of the junior and senior years. In the second semester of the freshman and sophomore years the jury is folded into a comprehensive career evaluation called the Freshmen Review and the Sophomore Readmittance Exam, respectively. These career evaluations are to assess each student’s progress in relationship to the standards of the program and progress toward degree completion. Students in the major program may be notified of probationary status after the Freshmen Review. All majors must pass the Sophomore Readmittance Evaluation in order to continue in the major. This exam stands on its own as a separate evaluation from course grades.

To be eligible for graduation, dance majors must meet the proficiency requirements of having completed two semesters of level IV technique (DANC 401/402) or achieved an equivalent through departmentally approved summer study. In order to graduate, students must also complete a senior project, which is a practical presentation in both performance and choreography. Senior projects are approved in multiple stages by a review committee composed of full-time faculty members. Eligibility is based on the student’s overall academic record (credits earned, requirements met). Approval in stage one is based on the quality of the student’s written proposal; in stage two it is based upon evaluation/review of the student’s completed project proposed for presentation.

The VCU dance program provides abundant opportunities for students to interact with faculty and guest artists in academic, professional, creative and performance contexts. Within the School of the Arts, dance students have frequent opportunities to work collaboratively with other students in the arts. Possibilities include the visual arts, participation in multimedia events and productions outside the dance department. Any dance major can perform in numerous formal concerts, informal showings and lecture-demonstrations produced by the department. Opportunities also are available for training in teaching, but students interested in earning state certification should consult their advisers.

An audition is required for acceptance into the dance program. Applicants for the Bachelor of Fine Arts in Dance and Choreography must follow the admissions guidelines for arts students as described in the "Admission to the university" section of the bulletin.

Degree requirements for Bachelor of Fine Arts in Dance and Choreography

<table>
<thead>
<tr>
<th>Credits</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman year, fall semester</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>DANC Modern Dance Technique and Workshop</td>
</tr>
<tr>
<td>3</td>
<td>DANC/DANZ Ballet Technique and Laboratory</td>
</tr>
<tr>
<td>3</td>
<td>DANC 103 Survey of Dance History (general education)</td>
</tr>
<tr>
<td>2</td>
<td>DANC 105 Improvisation</td>
</tr>
<tr>
<td>3</td>
<td>UNIV 111 Focused Inquiry I (university core)</td>
</tr>
<tr>
<td>3</td>
<td>MATH 131 or STAT 208 (university core)</td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

| Freshman year, spring semester |
| 3 | DANC Modern Dance Technique and Workshop |
| 3 | DANC/DANZ Ballet Technique and Laboratory |
| 3 | DANC 104 Survey of Dance History (general education) |
| 2 | DANC 107 Music and Dance Forms |
| 2 | DANC 162 Rehearsal and Performance |
| 3 | UNIV 112 Focused Inquiry II (university core) |
| 16 | |

| Sophomore year, fall semester |
| 3 | DANC Modern Dance Technique and Workshop |
| 3 | DANC/DANZ Ballet Technique and Laboratory |
| 3 | DANC 205 Composition |
| 3 | DANC 260 Dance Production Workshop |
| 3 | Approved natural/physical science* (university core) |
| 1 | Technique elective** |
| 15 | |

| Sophomore year, spring semester |
| 3 | DANC Modern Dance Technique and Workshop |
| 3 | DANC/DANZ Ballet Technique and Laboratory |
| 3 | DANC 206 Composition |
| 3 | DANC 207 Studies in Music for Dancers |
| 3 | UNIV 200 Writing and Rhetoric or equivalent (university core) |

| Junior year, fall semester |
| 3 | DANC Modern Dance Technique and Workshop |
| 2 | DANC/DANZ Ballet Technique and Laboratory |
| 3 | DANC 303 Choreography/Performance |
| 1 | DANC 317 Anatomy for the Dancer |
| 3 | Approved humanities/fine arts* (non-DANC) (university core) |
| 3 | Approved social/behavioral science* (university core) |
| 15 | |

| Junior year, spring semester |
| 3 | DANC Modern Dance Technique and Workshop |
| 2 | DANC/DANZ Ballet Technique and Laboratory |
| 3 | DANC 304 Choreography/Performance |
| 3 | DANC 313 or DANC 413 (general education: dance/culture elective) |
| 2 | DANC 318 Dance Science |
| 2 | Technique elective** |
| 16 | |

| Senior year, fall semester |
| 3 | DANC Modern Dance Technique and Workshop |
| 2 | DANC Ballet Technique |
| 3 | DANC 407 Teaching Methods for Dance |
| 3 | Dance career elective*** |
| 3 | Open elective |
| 14 | |

| Senior year, spring semester |
| 3 | DANC Modern Dance Technique and Workshop |
| 3 | DANC 490 Senior Project (capstone) |
| 6 | Open electives** |
| 12 | |

Total credits 120

*University core requirements in natural/physical science, social/behavioral science and humanities/fine arts must be selected from the university approved lists.

**Technique electives must be selected from: DANC 126, 127 African-Caribbean Dance I; DANC 251 Jazz Technique; DANC 121, 122 Tap Technique I; DANC 255, 256 Hip Hop Dance; DANC 141, 142 Ballroom Dancing; DANC 315 Contact Improvisation; or approved topics courses (such as Pilates, EBAS, yoga), which are developed each year to enliven the curriculum and reflect current trends.

***Dance Career Elective must be selected from: DANC 319, 320 Video Choreography Workshop, DANC 360 Lighting Design for Dance or approved topics courses such as “Dance Management.” Please note: 1) Total number of credits required for graduation is 120. 2) All dance majors must complete modern technique to the DANC 402 level (or an equivalent approved by the chair and full-time faculty) to be eligible for graduation with a B.F.A. in Dance and Choreography.

Richmond Ballet trainees track

VCU Dance offers a four-year degree track within the B.F.A. specifically designed for Richmond Ballet trainees. The two-year trainee program of the Richmond Ballet provides intensive study and opportunities to perform in concert with the
Richmond Ballet Company. Within this degree track, Richmond Ballet trainees enroll as full-time VCU dance majors when they enroll in the Richmond Ballet Trainee Program. Students must pass auditions for both programs and meet VCU academic requirements for admission. Once admitted into this special program, students receive credit in the Department of Dance and Choreography for their pre-professional training at the Richmond Ballet while taking general education courses and modern dance technique at VCU. Upon completion of the two-year trainee program, those students who do not join the Richmond Ballet Company can become full-time dance majors at VCU, on track to finish a B.F.A. in Dance and Choreography in two more years. They then have the opportunity to continue to refine their dance performance skills at VCU while enjoying the range of educational opportunities offered by the university. This program also is designed to enable Richmond Ballet trainees to expand their potential through departmental course offerings such as improvisation, dance sciences, anatomy for dancers, dance history, music and dance forms, contact improvisation, teaching methods, dance management, video/choreography, lighting design and dance, and dance production.

Students in the track for Richmond Ballet trainees must pay tuition for both the VCU and the Richmond Ballet Trainee programs.

Richmond Ballet/VCU Dance combined degree track

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman year, fall</td>
<td>DANC Modern Dance Technique and Workshop</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DANC 103 Survey of Dance History (general education)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DANC 293 Professional Performance: Trainee Level First Year</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>UNIV 111 Focused Inquiry I (university core)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total for semester</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Freshman year, spring</td>
<td>DANC Modern Dance Technique and Workshop</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DANC 104 Survey of Dance History (general education)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DANC 294 Professional Performance: Trainee Level First Year</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>UNIV 112 Focused Inquiry II (university core)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total for semester</strong></td>
<td><strong>16</strong></td>
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<tr>
<td>Sophomore year, fall</td>
<td>DANC Modern Dance Technique and Workshop</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DANC 393 Professional Performance: Trainee Level Second Year</td>
<td>7</td>
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<tr>
<td></td>
<td>UNIV 200 Writing and Rhetoric or equivalent (university core)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Approved natural/physical science* (university core)</td>
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<tr>
<td></td>
<td><strong>Total for semester</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Sophomore year, spring</td>
<td>DANC Modern Dance Technique and Workshop</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DANC 394 Professional Performance: Trainee Level Second Year</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Approved social/behavioral science* (university core)</td>
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</tr>
<tr>
<td></td>
<td><strong>Total for semester</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Junior year, fall</td>
<td>DANC Modern Dance or Ballet Technique and Workshop</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DANC 105 Improvisation</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DANC 207 Studies in Music for Dancers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DANC 260 Dance Production Workshop</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DANC 317 Anatomy for the Dancer (general education)</td>
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</tr>
<tr>
<td></td>
<td>Approved humanities/fine arts* (non-DANC) (university core)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total for semester</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>Junior year, spring</td>
<td>DANC Modern Dance or Ballet Technique and Workshop</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

**University Core** requirements in natural/physical science, social/behavioral science and humanities/fine arts must be selected from the university approved lists.

**Recommended dance electives include:**
- DANC 315 Contact Improvisation
- DANC 319, 320 Video/Choreography Workshop
- DANC 261-262 or 361-362 Rehearsal and Performance or DANC 371, 372 Repertory; and DANC 360 Lighting Design for Dance; DANC 126, 127 African-Caribbean Dance I; DANC 251 Jazz Technique; DANC 121, 122 Tap Technique I; DANC 255, 256 Hip Hop Dance; DANC 141, 142 Ballroom Dancing; or approved topics courses, which are developed each year to enliven the curriculum and reflect current trends.

Please note: 1) Total number of credits required for graduation is 120. 2) All dance majors must complete modern technique to the DANC 402 level (or an equivalent approved by the chair and full-time faculty) to be eligible for graduation with a B.F.A. in Dance and Choreography.

Dance, minor in

Students can begin accruing credit hours toward a dance minor at any time. Requests for the minor can be made only after the student has earned a minimum of eight credits in dance at VCU, with a minimum overall GPA of 3.0. (Transfer credits are not accepted toward the minor.) Minor requests are to be submitted to the dance minor adviser and approved by the department chair. The minor consists of a total of 25 credits. Students wishing to minor in dance should expect that not all classes are offered each term. Also, most classes for the minor are designated “non-major,” which generally means they are open to the university population and fill quickly.

No audition is required for the dance minor.

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Dance technique</td>
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</tr>
<tr>
<td>Select from: DANC 114, 121, 122, 126, 127, 133, 134, 155, 156, 183, 184, 214, 221, 222</td>
<td></td>
</tr>
<tr>
<td>Improvisation</td>
<td>2</td>
</tr>
<tr>
<td>Select from: DANC 105, 106, 315, 316</td>
<td></td>
</tr>
<tr>
<td>Dance history</td>
<td>6</td>
</tr>
<tr>
<td>Select from: DANC 103, 104, 313, 413</td>
<td></td>
</tr>
</tbody>
</table>
Dance elective 3
Select from: DANC 243, 319, 320, 343, 360 (or 205, 206 only with permission of the chair)
Total 25

Department of Fashion Design and Merchandising

TBA
Department Chair
www.vcu.edu/arts/fashion

The Department of Fashion Design and Merchandising offers two programs: the fashion design track leads to a Bachelor of Fine Arts degree and the fashion merchandising track leads to a Bachelor of Arts degree.

Both tracks are extremely time consuming. Students are expected to put class attendance and study time above other campus activities or employment.

All students are required to have a laptop computer. The department can provide specifications.

Students must take classes in the sequence prescribed by the department and adhere to all prerequisites. Failure to comply can lengthen the number of semesters necessary for completion of degree requirements.

Internships provide not only experience but industry contacts, and are strongly recommended. They may be conducted primarily during the summer semester.

Fashion design and merchandising courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to fashion design and merchandising (FASH) courses.

Fashion (design), Bachelor of Fine Arts (B.F.A.)

The fashion design curriculum offers technical and design courses that provide skills required in the fashion industry. Individual designs are presented in two-dimensional form, developed and perfected through techniques used in the fashion industry, and then executed in final and three-dimensional form in fabrics appropriate to the design. Sophomores are required to purchase departmentally approved dress forms and junior design students are encouraged to complete internships in the fashion industry in New York City. Internships provide not only experience but industry contacts, and are strongly recommended. They may be conducted primarily during the summer semester.

Study abroad programs are readily available for fashion design majors.

Degree requirements for Bachelor of Fine Arts in Fashion

Freshman year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 131 Drawing Studio</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 132 Surface Research</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 139 Project</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 103 Survey of Western Art</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 111 Focused Inquiry I (university core)</td>
<td>3</td>
</tr>
<tr>
<td>University core or general education elective</td>
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</table>

Freshman year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>ARTF 133 Space Research</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 134 Time Studio</td>
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<tr>
<td>ARTF 139 Project</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 104 Survey of Western Art</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry II (university core)</td>
<td>3</td>
</tr>
<tr>
<td>University core or general education elective</td>
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</table>

Sophomore year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FASH 201 Construction Techniques</td>
<td>3</td>
</tr>
<tr>
<td>FASH 203 Patternmaking</td>
<td>3</td>
</tr>
<tr>
<td>FASH 205 Fashion Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>FASH 290 Textiles for the Fashion Industry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 131 or STAT 208 (university core – quantitative literacy)</td>
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</table>

Sophomore year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 202 Draping</td>
<td>3</td>
</tr>
<tr>
<td>FASH 204 Patternmaking</td>
<td>3</td>
</tr>
<tr>
<td>FASH 206 Fashion Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>FASH 345 Computers for Fashion Design: Adobe Photoshop and Illustrator</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric or equivalent (university core)</td>
<td>3</td>
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Junior year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 301 Design I Studio</td>
<td>6</td>
</tr>
<tr>
<td>FASH 319 Contemporary Fashion</td>
<td>3</td>
</tr>
<tr>
<td>FASH 403 Design Theory and Illustration I</td>
<td>3</td>
</tr>
<tr>
<td>Approved natural/physical science (university core)</td>
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</table>

Junior year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>FASH 302 Design I Studio</td>
<td>6</td>
</tr>
<tr>
<td>FASH 404 Design Theory and Illustration II</td>
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</tr>
<tr>
<td>Approved humanities/fine arts (university core)</td>
<td>3</td>
</tr>
<tr>
<td>Approved social/behavioral science (university core)</td>
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</table>

Senior year, fall semester

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<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FASH 401 Design II Studio</td>
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<tr>
<td>FASH 403 Design Theory and Illustration I</td>
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<tr>
<td>Art history elective</td>
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<tr>
<td>Humanities/fine arts elective (see list)</td>
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Senior year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FASH 402 Design II Studio</td>
<td>6</td>
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<tr>
<td>FASH 490 Fashion Seminar</td>
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<tr>
<td>General education elective</td>
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</tr>
<tr>
<td>Humanities/fine arts elective (see list)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credits 120

Note: Art Foundation students are accepted into the design track with the expectation and requirement that they will complete Art Foundation studio courses with a minimum of C and maintain a minimum GPA of 2.0.

Fashion (merchandising), Bachelor of Arts (B.A.)

The major in fashion merchandising requires a strong background in marketing, business and specialized professional courses with an emphasis on globalism.

Students are directed toward assignments that will develop their skills in research, writing, presentation and critical thinking. Graduates find career opportunities in fashion forecasting, product development, advertising and promotion, retail management, buying, and international marketing.

Internships provide not only experience but industry contacts, and are strongly recommended. They may be conducted primarily during the summer semester.

Study abroad programs are readily available for fashion merchandising majors.
### Degree requirements for Bachelor of Arts in Fashion

#### Freshman year, fall semester
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 103 Survey of Western Art</td>
<td>3</td>
</tr>
<tr>
<td>FASH 145 Computers for Fashion I</td>
<td>3</td>
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<tr>
<td>FASH 240 Survey of the Fashion Industry I</td>
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</tr>
<tr>
<td>UNIV 111 Focused Inquiry I (university core)</td>
<td>3</td>
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<tr>
<td>Approved social/behavioral science (university core)</td>
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#### Freshman year, spring semester
<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ARTH 104 Survey of Western Art</td>
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</tr>
<tr>
<td>FASH 241 Survey of the Fashion Industry II</td>
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</tr>
<tr>
<td>MATH 131 or STAT 208 (university core – quantitative literacy)</td>
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<tr>
<td>UNIV 112 Focused Inquiry II (university core)</td>
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</tr>
<tr>
<td>Approved natural/physical science (university core)</td>
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#### Sophomore year, fall semester
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<tbody>
<tr>
<td>ACCT 202 Accounting for Non-business Majors</td>
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<tr>
<td>English literature or language (university core – humanities/fine arts)</td>
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<tr>
<td>General education electives</td>
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<tr>
<td>Non-Western art</td>
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#### Sophomore year, spring semester
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<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FASH 210 Visual Merchandising or FASH 350 Fashion</td>
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<tr>
<td>Promotion of FASH 380 Fashion Branding</td>
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<tr>
<td>FASH 250 Concepts of Fashion Merchandising Environment</td>
<td>3</td>
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<tr>
<td>FASH 290 Textiles for the Fashion Industry</td>
<td>3</td>
</tr>
<tr>
<td>FASH 319 Contemporary Fashion</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric or equivalent (university core)</td>
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#### Junior year, fall semester
<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>FASH 341 Merchandise Planning and Control</td>
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<tr>
<td>FASH 343 Fashion Forecasting</td>
<td>3</td>
</tr>
<tr>
<td>INFO 162 Introduction to Microcomputer-based Spreadsheet Packages</td>
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</tr>
<tr>
<td>MKTG 301 Marketing Principles</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 121 Effective Speech or SPCH 321 Speech for Business and the Professions</td>
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</tr>
<tr>
<td>General education elective</td>
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#### Junior year, spring semester
<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>FASH 342 Retail Buying Simulation</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 325 Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 330 Integrated Marketing Communications</td>
<td>3</td>
</tr>
<tr>
<td>English literature</td>
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<tr>
<td>General education elective</td>
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</tr>
</tbody>
</table>

#### Senior year, fall semester
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 443 Supervision and Management</td>
<td>3</td>
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<tr>
<td>FASH 450 Line Development</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 315 Buyer Behavior</td>
<td>3</td>
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<tr>
<td>MKTG 340 Retail Management</td>
<td>3</td>
</tr>
<tr>
<td>General education elective</td>
<td>3</td>
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</tbody>
</table>

#### Senior year, spring semester
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 445 Advanced Application in Store Development</td>
<td>3</td>
</tr>
<tr>
<td>FASH 451 Importing and Exporting Fashion</td>
<td>3</td>
</tr>
<tr>
<td>FASH 490 Fashion Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MKTG/INTL 320 International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>General education elective</td>
<td></td>
</tr>
</tbody>
</table>

Internships are not required but strongly recommended. FASH 493 Fashion Internship (1, 2 or 3 credits)

**Total credits** 120

### Department of Graphic Design

Graphic design is a creative and analytical process that integrates art and technology to communicate ideas and information. The goal of the Department of Graphic Design at VCU is to educate students to become innovators and leaders in three related areas of professional practice: print design, sequential design and interaction design.

**Mission statement**

The Department of Graphic Design encourages the exploration of diverse problem-solving methodologies, innovative investigations and creative research in all forms of communication. It is dedicated to excellence in teaching, scholarship, academic and creative research and professional practice. The Department of Graphic Design provides both an undergraduate and graduate education stressing creative and intellectual thinking; awareness of individual, social, cultural and communicative issues; the integration of new technology; and a concern for ethical implications and the natural environment. The program actively contributes to the university, local, state, national and international communities through its scholarly and creative activities, educational programs and service efforts.

### Administration

TBA

Department Chair

www.vcu.edu/arts/graphicdesign

### Graphic design courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to graphic design (GDES) courses

### Learning outcomes

**Admission and standards of graphic design**

**Curriculum outline**

**Learning outcomes**

The learning outcomes for majors in the department include the following:

1. **Utilize forms of communication**: With a sense of aesthetics, personal and professional integrity, and message clarity, students will utilize visual and verbal forms of communication to convey ideas and information.

2. **Address needs of client and audience**: Students will demonstrate an understanding of their responsibility to client and audience — determining needs, structuring problems and solving problems creatively.

3. **Focus on ethics**: Students will solve communication problems with a focus on their positive ethical impact upon culture and society.
4. Embrace technology as a vehicle of communication: Students will demonstrate the ability to use new and emerging technology as a vehicle of effective communication and a means for the invention of expressive form.

5. Practice design as a dynamic process: Students will understand and practice design as a process that relies upon intuition, reason, ideation methods and effective research for the creation of appropriate and inventive solutions

Admission and standards of graphic design

Students who have successfully completed the Art Foundation Program may apply for admission into the graphic design B.F.A. program. Due to the sequence of the required graphic design courses, students are admitted only in the fall semester. All applicants must submit a portfolio of work. The Department of Graphic Design uses the portfolio evaluation criteria established in the School of the Arts for initial acceptance.

Students who wish to transfer into the Graphic Design Program must first apply to the Art Foundation Program for evaluation. A transfer student who has successfully completed the Art Foundation Program must demonstrate equivalent preparation at another institution and submit a portfolio of work for review by graphic design faculty. Transfer students admitted into the Graphic Design Program must complete all major requirements determined to be missing from their academic design experience. Transfer students should expect to spend at least five semesters in the Graphic Design Program in order to qualify for a B.F.A.

1. Students must complete the required pre- and corequisites of the Graphic Design Program in the order presented in the curriculum outline. This structure enables students to develop knowledge and skills based in graphic design that will prepare them for upper level studio courses and successful entry into the graphic design profession.

2. Students are required to meet regularly with the department undergraduate adviser each semester on scheduled advising dates to make sure they are completing courses as required and are preparing for the portfolio reviews as needed.

3. Students must earn a minimum cumulative GPA of 2.5 to be accepted to the graphic design program. Once accepted, students must maintain a minimum 2.5 GPA in GDES courses to continue in the program.

4. A portfolio review of graphic design studio work takes place at the end of the sophomore year. The student’s portfolio, GPA and individual course evaluations are evaluated during this review to determine if the student may continue in the program. Additionally, the following courses must be completed at the end of the sophomore year to be eligible for continuation in the program: GDES 202, 204, 205, 211, 212, 213, 214, 216, 252.

5. A second portfolio review of graphic design studio work takes place at the end of the junior year. The student’s portfolio, GPA and individual course evaluations are evaluated during this review to determine if the student may continue in the Graphic Design Program.

6. Students are required to have a laptop computer and appropriate software upon initial entry into the Graphic Design Program. Students will receive the specific technology requirements upon acceptance into the program. Students have an option to purchase a computer package at an academic discount or lease the same equipment through the School of the Arts Computer Center.

Curriculum outline

Art Foundation year*, fall semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 131</td>
<td>Drawing Studio</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 132</td>
<td>Surface Research</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 139</td>
<td>Project</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 103</td>
<td>Survey of Western Art I</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 111</td>
<td>Focused Inquiry I (university core)</td>
<td>3</td>
</tr>
<tr>
<td>Approved quantitative literacy (university core)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><em><em>Art Foundation year</em>, fall semester</em>*</td>
<td><strong>16</strong></td>
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</table>

Art Foundation year*, spring semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ARTF 133</td>
<td>Space Research</td>
<td>3</td>
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<tr>
<td>ARTF 134</td>
<td>Time Studio</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 139</td>
<td>Project</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 104</td>
<td>Survey of Western Art II</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 112</td>
<td>Focused Inquiry II (university core)</td>
<td>3</td>
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<tr>
<td>Approved humanities/fine arts (university core)</td>
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</table>

Sophomore year, fall semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDES 211</td>
<td>Typography</td>
<td>3</td>
</tr>
<tr>
<td>GDES 212</td>
<td>Design Form and Communication</td>
<td>3</td>
</tr>
<tr>
<td>GDES 214</td>
<td>Imaging I</td>
<td>3</td>
</tr>
<tr>
<td>GDES 252</td>
<td>History of Visual Communication</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 200</td>
<td>Writing and Rhetoric (university core)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Sophomore year, fall semester</strong></td>
<td><strong>15</strong></td>
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</table>

Sophomore year, spring semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GDES 202</td>
<td>Design Technology I</td>
<td>3</td>
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<tr>
<td>GDES 205</td>
<td>Design Methods and Processes</td>
<td>3</td>
</tr>
<tr>
<td>GDES 213</td>
<td>Typography II</td>
<td>3</td>
</tr>
<tr>
<td>GDES 216</td>
<td>Imaging II</td>
<td>3</td>
</tr>
<tr>
<td>GDES 253</td>
<td>Theory and Philosophy of Visual Communication</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>Sophomore year, spring semester</strong></td>
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Junior year, fall semester

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>GDES 343</td>
<td>Systems in Design</td>
<td>3</td>
</tr>
<tr>
<td>GDES 345</td>
<td>Print I</td>
<td>3</td>
</tr>
<tr>
<td>GDES 347</td>
<td>Interaction I</td>
<td>3</td>
</tr>
<tr>
<td>GDES elective (300- to 500-level)</td>
<td>Approved social/behavioral science (university core)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Junior year, fall semester</strong></td>
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Junior year, spring semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDES 346</td>
<td>Visual Narrative I</td>
<td>3</td>
</tr>
<tr>
<td>GDES 365</td>
<td>Print II</td>
<td>3</td>
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<tr>
<td>GDES 367</td>
<td>Interaction II</td>
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<td>General education elective(s)</td>
<td>Approved natural/physical science (university core)</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>Junior year, spring semester</strong></td>
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Senior year, fall semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>GDES 470</td>
<td>Senior Seminar</td>
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</tr>
<tr>
<td>GDES elective (300- to 500-level)</td>
<td>General education electives (300- to 500-level)</td>
<td>6</td>
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<tr>
<td>Open elective (300- to 500-level)</td>
<td>Approved natural/physical science (university core)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Senior year, fall semester</strong></td>
<td><strong>16</strong></td>
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</table>

Senior year, spring semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDES 472</td>
<td>Senior Studio</td>
<td>3</td>
</tr>
<tr>
<td>GDES electives (300- to 500-level)</td>
<td>Open electives (300- to 500-level)</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Senior year, spring semester</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Total credits: 123

* In addition to the required courses, Art Foundation students are encouraged to complete six credits of general education electives during this first year.

Note: Within the 123 credit total, a minimum of 45 credits in 300- to 500-level courses distributed in the following areas is required for a bachelor's degree:

- GDES required upper-level studio courses and senior seminar: 27 credits
- GDES electives: 12 credits
- VCU general education electives: 6 credits
- VCU open electives: 9 credits
Department of Interior Design

The Department of Interior Design is accredited by the Council for Interior Design Accreditation. The mission of the department is to provide an intellectually rigorous, studio-based experience grounded in the issues of interior architecture. The department develops in its students an enduring passion and curiosity for their work, a determination to continually seek quality in their endeavors, an ability to reflect constructively upon their actions as individuals and a responsibility for their lifelong education. The department focuses students’ professional activities while encouraging connections between these activities and the larger forum of ideas that enrich their culture and environment. The Bachelor of Fine Arts in Interior Design program prepares students for careers in interior design or entry into programs of advanced study.

The department also offers a Master of Fine Arts in Design with a concentration in interior environments with a first-professional track and a postprofessional track. These tracks seek to produce competent creative designers whose design solutions are based on human response in the contemporary environment. Mastery of design skills, development of productive habits, knowledge of resources and an awareness of interrelated disciplines equip the student with the tools and expertise necessary to pursue creative design positions.

The department relates with the professional interior design community through a variety of activities. The faculty invites featured speakers to share experiences, participate in the annual ASID EXPO, facilitate mentorships with professional designers and support student internships. An active student chapter of the American Society of Interior Designers provides additional enriching opportunities for student involvement.

The department offers limited accelerated undergraduate preparation for those individuals who lack full preparation. Assessment of the individual candidate’s needs will determine the scope of the preparatory course work. This is an opportunity to gain the skills and design experiences required to qualify for admission to the graduate degree program.

The department has a very comprehensive Web site with extensive information about the program, interior design in general, faculty, student work and the department newsletter. In advance of scheduling a meeting for department advising or for application to the program, students should review the Web site at www.pubinfo.vcu.edu/artweb/interiors/.

Administration

Sharran F. Parkinson
Professor and Department Chair

www.vcu.edu/arts/interiordesign

Interior design courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to interior design (IDES) courses.

Interior Design, Bachelor of Fine Arts (B.F.A.)

The Department of Interior Design, accredited by the Council for Interior Design Accreditation, provides the breadth of a university education with the depth of a professional curriculum. The curriculum provides for the study of space, form, color and light in collaboration with the pragmatic investigation of building codes, materials, finishes, construction methods and business practices. An important focus also is placed on the study of design theory and the history of interior environments. All of these areas are synthesized in the curriculum to provide learning of the overall context of the built interior environment. Graduates are prepared with the skills and knowledge that can facilitate the students transition into an entry-level interior design position at a successful firm or corporation, or entry into programs of advanced study. The department also prepares students with the skills and knowledge that will allow for lifelong learning and professional development in the design industry. Prospective students are encouraged to review the VCUArts Undergraduate Admissions Web site as well as the VCUArts Art Foundation Web site.

Standards of interior design

1. Students who have successfully completed the Art Foundation Program may enter the program in the fall semester only. All applicants must submit a portfolio of work. The department uses the portfolio evaluation criteria established in the School of the Arts for initial acceptance. A second portfolio review of interior design studio work takes place at the end of the sophomore year. The faculty uses the portfolio as an advising tool to determine student placement in the program. The student’s GPA also is evaluated to determine if the student may continue in the program. The following courses must be completed at the end of the sophomore year to be eligible for continuation in the program: IDES 201, 202, 211, 212, 231, 251, 252 and 311.

2. Students who wish to transfer into the interior design program must first apply to the Art Foundation Program for evaluation. A student must demonstrate equivalent preparation at other institutions and submit a portfolio of work for review by interior design faculty. Transfer students admitted into the program must complete all major requirements determined to be missing from their academic design experience.

3. Students must complete the required pre- and corequisites of the program in the order presented in the curriculum outline. This structure enables students to develop knowledge and skill bases in interior design that will prepare them for upper-level interior design studio courses (IDES 301, 302, 400 and 401) and successful entry into the interior design profession.

4. Students must earn at least a 2.5 GPA on all work before entering the program, in the semester immediately before entering the major and each semester they continue in the program. Students must maintain a minimum grade of C in each studio in order to continue to the next semester of studio courses.

5. Students are required to have a laptop computer and appropriate software upon entry into the interior design program. The department recommends a specific computer package that is used throughout the academic year. The package is updated each year because of changes in computer technology. The total cost is approximately $3,800 and financial aid is available to those who qualify. An interior design student kit also is required upon initial entry into the program; it contains a variety of drawing supplies for graphics and interior design studios. Students will receive the computer requirements and student kit requirements upon acceptance into the program.

6. Students with experience in interior design or related fields may challenge some interior design courses based on regulations for "Credit by Examination" as stated in this bulletin. Students must be accepted into the interior design program and challenges are based upon demonstrated experience, portfolio work and professional years of experience. No more than nine credit hours may be challenged and the challenge may not be requested during the final semester before graduation. Courses that may be challenged include: IDES 211, 212, 231, 321, 324 and 431.

7. A student majoring in interior design who does not enroll in courses in the major as a full-time student for three or more consecutive semesters (including summer) must reapply to the program, submitting a portfolio and undergoing a grade review.

B.F.A. in Interior Design curriculum

Freshman year, fall semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 131</td>
<td>Drawing Studio</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 132</td>
<td>Surface Research</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 139</td>
<td>Project</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 103</td>
<td>Survey of Western Art I</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 111</td>
<td>Focused Inquiry I (university core)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Approved quantitative literacy (university core)</td>
<td>3</td>
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<tr>
<td></td>
<td>Total</td>
<td>16</td>
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</table>

Freshman year, spring semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 133</td>
<td>Space Research</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 134</td>
<td>Time Studio</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 139</td>
<td>Project</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 104</td>
<td>Survey of Western Art II</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 112</td>
<td>Focused Inquiry II (university core)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Approved natural/physical science (university core)</td>
<td>3</td>
</tr>
</tbody>
</table>
Sophomore year, fall semester
IDES 201 Introductory Interior Design Studio I 4
IDES 211 Interior Graphics I 3
IDES 231 Fundamentals of Interior Design 3
IDES 251 Historic Environments: Ancient through 19th Century 3
UNIV 200 Writing and Rhetoric or equivalent (university core) 3

Sophomore year, spring semester
IDES 202 Introductory Interior Design Studio II 4
IDES 212 Interior Graphics II 3
IDES 252 Historic Environments: 20-21st Centuries 3
IDES 311 Advanced Interior Graphics I 3
Approved social/behavioral science (university core) 3

Junior year, fall semester
IDES 301 Interior Design Studio I 4
IDES 312 Advanced Interior Graphics II 3
IDES 321 Interior Materials and Textiles 3
IDES 323 Light and Color in Interior Environments 3
Approved humanities/fine arts (university core) 3

Junior year, spring semester
IDES 302 Interior Design Studio II 4
IDES 422 Building Systems 3
IDES 431 ID Business Practices (ethics) 3
Art/design elective 3
General education elective 3

Senior year, fall semester
IDES 400 Senior Interior Design Studio I 4
IDES 441* Senior Seminar I 2
IDES 493 Interior Design Internship 3
General education elective 3

Senior year, spring semester
IDES 401* Senior Interior Design Studio II 4
IDES 442* Senior Seminar II 2
Art/design electives (300- to 400-level) 3
General education electives (300- to 400-level) 3

Total credits 120
* Capstone series

The Department of Kinetic Imaging prepares students to use video, animation and sound for the purpose of art-making, self-expression and experimentation. The kinetic imaging programs are designed for students who want to study video art, sound design and experimental two-dimensional and three-dimensional animation. Emphasis is placed on artistic uses of the media.

The department offers an undergraduate curriculum leading to a Bachelor of Fine Arts in Kinetic Imaging as well as a graduate level program that results in a Master of Fine Arts in Fine Arts.

Kinetic imaging courses
Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to kinetic imaging (KINE) courses.

Kinetic Imaging, Bachelor of Fine Arts (B.F.A.)
The Department of Kinetic Imaging prepares students to use video, animation and sound for the purpose of art-making, self-expression and experimentation. The program is designed for students who want to study video art, sound design and experimental two-dimensional and three-dimensional animation. Emphasis is placed on artistic uses of the media.

B.F.A. in Kinetic Imaging curriculum

Freshman year, fall semester
ARTF 131 Drawing Studio 3
ARTF 132 Surface Research 3
ARTF 139 Project 1
ARTH 103 Survey of Western Art I 3
UNIV 111 Focused Inquiry I (university core) 3
Approved quantitative literacy (university core) 3

Freshman year, spring semester
ARTF 133 Space Research 3
ARTF 134 Time Studio 3
ARTF 139 Project 1
ARTH 104 Survey of Western Art II 3
UNIV 112 Focused Inquiry II (university core) 3
Approved humanities/fine arts (university core) 3

Sophomore year, fall semester
KINE 208 Introduction to Computer Techniques 3
KINE 233 Media Arts Survey 3
KINE 234 Introduction to Animation 3
UNIV 200 Writing and Rhetoric (university core) 3
Approved natural/physical science (university core) 3

Sophomore year, spring semester
KINE 235 Electronic Animation I 3
KINE 236 Introduction to Video 3
KINE 237 Sound Communication 3
Approved social/behavioral science (university core) 3
Directed elective** – literature 3

Junior year, fall semester
KINE 336 Video I 3
KINE 338 Computer Graphics II: 3-D Modeling 3
KINE 357 Critical Issues in Media 3
Directed elective** – history 3

* Capstone series

Department of Kinetic Imaging

Pam Turner
Associate Professor and Department Chair
www.arts.vcu.edu/kineticimaging

The Department of Kinetic Imaging prepares students to use video, animation and sound for the purpose of art-making, self-expression and experimentation. The
Emphasis area elective* 3

Junior year, spring semester
Directed elective** 3
Emphasis area elective* 12
Open elective 1

15
16

Senior year, fall semester
Emphasis area elective* – art history 3
Emphasis area elective* 9
Open elective*** 3

15

Senior year, spring semester
KINE 403 Senior Studio 3
Emphasis area elective* 6
Open elective*** 3

12

Total credits 120

* Emphasis area electives are any upper-division courses within the School of the Arts that the student, in consultation with his/her adviser, deems to be applicable to the individuals major course of study.
** Directed electives are VCU “general studies” electives mandated by the department.
*** Open electives are any courses from any department within the university.

** Administration

Darryl Harper
Associate Professor and Interim Department Chair
(804) 828-1166
www.vcu.edu/arts/music

** Information for undergraduates

Admission and auditions
Grades and achievement levels
Electives in music
Internship in music
Fees
Recital/convocation attendance
Master class

Ensemble requirements

Admission and auditions
An audition/interview as well as both written and aural general musicianship examinations are necessary for admission to programs in the Department of Music. Students must also meet the general admission requirements of the university. For audition information contact Virginia Commonwealth University, Department of Music, 922 Park Ave., P.O. Box 842004, Richmond, VA 23284-2004; phone (804) 828-1166 or e-mail music@vcu.edu.

Grades and achievement levels
All music majors are required to maintain a cumulative GPA of 2.0 and pass at least one applied achievement level within any two-semester period (not including summers) in order to continue as music majors. Jazz studies majors must pass one applied achievement level of classical instrument study per two-semester period (not including summers) and at least one jazz applied music level within the first three semesters in order to maintain a jazz studies concentration. All music students also must pass MUBS 145-146 Theory and Aural Skills I-II by the end of the fourth semester. Any student who fails to meet or maintain these standards will not be allowed to continue as a music major. A student may audition for readmission into the department as a music major only with permission from the Department of Music.

A cumulative GPA of 2.8 is required for music education students to qualify for student teaching placement. Music education students who do not maintain a cumulative 2.8 GPA will not be allowed to continue in the music education track, but may continue in the Bachelor of Arts program or the Bachelor of Music performance track if they meet the minimum requirements that apply to those respective degree programs.

Electives in music
Students majoring in a field other than music may register for ensembles, private lessons and a variety of classroom courses in music. Classes in music appreciation, African-American music, introduction to writing music, basic music lessons and a variety of classroom courses in music. Classes in music appreciation, African-American music, introduction to writing music, basic music skills and special offerings in music are specifically designed for the non-music major.

Internship in music
Interested students should consult with a faculty member closely associated with the appropriate field. As the student approaches junior academic standing, he or she may apply to the department for participation in APPM 493 Music Internship. Applications will be reviewed on the basis of academic GPA, instructor recommendation(s), professional promise, and demonstrated interest and competence in the area of study. The student must possess a minimum 2.5 overall GPA with a minimum 3.0 GPA in major course work in music. All students (including transfers) must have completed a minimum of 60 credits.

All internships for credit are approved by the Department of Music. The experience may also be coordinated by VCU’s Cooperative Education/Internship Program. The latter office requires completion of an application and resume.

Fees
All students registering for APPL 200 Applied Lessons pay an applied music fee. This fee is additional to the comprehensive fee charged only to majors in the
School of the Arts. Current fee rates for music lessons can be found on the Student Accounting website at www.enrollment.vcu.edu/accounting/tuition_fees.html.

Recital/convocation attendance

All undergraduate majors are required to pass four semesters of recital/convocation attendance for graduation. During each semester of enrollment, the student must attend a minimum number of concerts or recitals plus departmental convocations in order to pass the requirement.

Master class

This requirement consists of participation in weekly master classes in the student’s applied major area. For students in the Bachelor of Music program, enrollment in master class is required for each semester that students enroll for a two-credit lesson on their principal performing instrument. A minimum of eight semesters in the performance concentration (jazz studies majors take four semesters classical and four semesters jazz) and six semesters for the music education concentration are required. Students in the Bachelor of Arts in Music program must also enroll in master class each semester they take a two-credit lesson until they complete a minimum of four semesters of master class on the same instrument.

Ensemble requirements

To ensure consistent skill development in ensemble settings, only one large ensemble credit per semester will be counted toward a student’s large ensemble requirements. Students whose principal instrument is a band or orchestral instrument must satisfy the large ensemble requirement by performing in a large ensemble on that instrument. Students whose principal instrument is voice must satisfy the requirement by performing in a large choral ensemble on voice. Those whose principal instrument is piano must complete four of their six elective credits by playing the piano in ensembles. Jazz studies majors must have ensembles approved in advance by their adviser or program director. Bachelor of Arts students must earn six credits in either large or small ensembles.

Music courses

Upper-division undergraduate students may enroll for selected 500-level graduate courses with permission of the department chair and instructor. Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level. Unless otherwise indicated, courses must be taken in numerical sequence.

The Department of Music offers courses in the following areas:

Use this link to see applied music (APPM) courses.
Use this link to see music composition (MUSC) courses.
Use this link to see music education (MUED) courses.
Use this link to see music history, literature and theory (MHIS) courses.

Music, Bachelor of (B.M.)

The Bachelor of Music is the initial professional degree in music. Its primary emphasis is on development of the skills, concepts and sensitivities essential to the professional life of the musician. At the center of the instructional program for this degree is the music core curriculum, comprising 27 credits of instruction in aspects of musicianship fundamental to all music degree programs. Included are courses in music theory, aural skills, music history and conducting.

The Bachelor of Music/music education concentration incorporates requirements necessary to qualify for the commonwealth of Virginia’s Collegiate Professional Certificate to teach music in public schools. Reciprocity between Virginia and numerous other states makes it possible for those music education students who become certified to teach in Virginia to obtain certification in those other states. A prospective student intending to pursue the instrumental track endorsement must complete the degree with a primary instrument of wind band or orchestra tradition; for those seeking the choral track endorsement, this instrument must be voice. For a student who wishes to elect the guitar or piano as a primary instrument, please contact the music department for details.

Applied music achievement levels

Bachelor of Music/performance curricula
- Piano
- Voice
- Jazz studies

Bachelor of Music/music education curriculum

Applied music achievement levels

Eight achievement levels have been established for applied instrumental and vocal study. These levels are explicit in terms of expected repertoire, musicianship/style, technique and sight-reading. While freshmen normally earn Level I at their first semester juries, transfer students may be awarded a higher level based on their entrance auditions. The table below indicates the achievement levels required for graduation with a Bachelor of Music.

Performance: VIII
Jazz: IV in classical studies,* VIII in jazz
Music education: VI

* Jazz saxophone students can elect four semesters of classical saxophone study (achieving Level IV) or take two semesters of classical saxophone plus two consecutive semesters of classical flute, clarinet, oboe or bassoon (achieving Level II in both classical saxophone and in the woodwind).

Bachelor of Music/performance curricula

Brass, percussion, strings, woodwinds

<table>
<thead>
<tr>
<th>Credits</th>
<th>I. General studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>A. University core</td>
</tr>
<tr>
<td></td>
<td>MATH 131 or STAT 208 (quantitative literacy) (3)</td>
</tr>
<tr>
<td></td>
<td>UNIV 111 and 112 Focused Inquiry I and II (6)</td>
</tr>
<tr>
<td></td>
<td>UNIV 200 Writing and Rhetoric or equivalent (research and academic writing) (3)</td>
</tr>
<tr>
<td></td>
<td>Approved humanities/fine arts (3)</td>
</tr>
<tr>
<td></td>
<td>Approved natural/physical science (3)</td>
</tr>
<tr>
<td></td>
<td>Approved social/behavioral science (3)</td>
</tr>
<tr>
<td></td>
<td>B. HIST 101 or 102 Survey of European History or HIST 103 or 104 Survey of American History (3)</td>
</tr>
<tr>
<td></td>
<td>C. Directed electives</td>
</tr>
<tr>
<td></td>
<td>Selected from humanities/fine arts, social/behavioral sciences, natural/physical sciences, mathematics (6)</td>
</tr>
<tr>
<td></td>
<td>D. Open electives (6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
<th>II. Major studies (applied)</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>APPL 311-314, 414-418 Applied Lessons (principal performing medium) (16)</td>
</tr>
<tr>
<td></td>
<td>APPM 370 Large Ensembles (8)</td>
</tr>
<tr>
<td></td>
<td>APPM 370/390 Ensemble electives (4)</td>
</tr>
<tr>
<td></td>
<td>APPM 463 Pedagogy (2)</td>
</tr>
<tr>
<td></td>
<td>APPM 492 Senior Project: Portfolio Review (1)</td>
</tr>
<tr>
<td></td>
<td>APPM 299 Master Class (eight semesters) (0)</td>
</tr>
<tr>
<td></td>
<td>APPM 394 Junior Recital (0)</td>
</tr>
<tr>
<td></td>
<td>APPM 494 Senior Recital (0)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
<th>III. Music core curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>APPM 381 Conducting (2)</td>
</tr>
<tr>
<td></td>
<td>APPM 199 Recital/Convocation Attendance (four semesters) (0)</td>
</tr>
<tr>
<td></td>
<td>MHIS 120 Introduction to World Musical Styles (3)</td>
</tr>
<tr>
<td></td>
<td>MHIS 145-146, 245-246 Theory and Aural Skills I-IV (16)</td>
</tr>
<tr>
<td></td>
<td>MHIS 321, 322 Music History I, II (6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
<th>IV. Supportive courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>A. Supportive courses</td>
</tr>
<tr>
<td></td>
<td>APPL 320 Applied Lessons Secondary Instrument (3)</td>
</tr>
<tr>
<td></td>
<td>APPM 173-174, 273 Keyboard Skills (3)</td>
</tr>
<tr>
<td></td>
<td>MHIS 305 Form and Analysis I (2)</td>
</tr>
<tr>
<td></td>
<td>MHIS 380 Survey of the Music Industry (3)</td>
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<td></td>
<td>B. Music electives (15)</td>
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<tr>
<td>Credit Level</td>
<td>Course Details</td>
</tr>
<tr>
<td>--------------</td>
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</tr>
</tbody>
</table>
| I. General studies | A. University core  
- MATH 131 or STAT 208 (quantitative literacy) (3)  
- UNIV 111 and 112 Focused Inquiry I and II (6)  
- UNIV 200 Writing and Rhetoric or equivalent (research and academic writing) (3)  
- Approved humanities/fine arts (3)  
- Approved natural/physical science (3)  
- Approved social/behavioral science (3)  

B. HIST 101 or 102 Survey of European History or HIST 103 or 104 Survey of American History (3)  
C. Directed electives  
Selected from humanities/fine arts, social/behavioral sciences, natural/physical sciences, mathematics (9)  
D. Open electives (2) |

| Total | 120 |

| Guitar Credits | 36 |

II. Major studies (applied)  
A. APPL 311-314, 414-418 Applied Lessons (principal performing medium) (16)  
B. APPM 370 Large Ensembles (4)  
C. APPM 370/390 Ensemble electives (6)  
D. APPM 390 Small Ensembles (4)  
E. APPM 463 Pedagogy (piano) (2)  
F. APPM 464 Piano Pedagogy Practicum (2)  
G. APPM 492 Senior Project: Portfolio Review (1)  
H. APPM 299 Master Class (eight semesters) (0)  
I. APPM 394 Junior Recital (0)  
J. APPM 494 Senior Recital (0)  
K. MHIS 303, 304 Piano Literature (4) |

| Total | 37 |

| III. Music core curriculum | A. APPM 381 Conducting (2)  
B. APPM 199 Recital/Convocation Attendance (four semesters) (0)  
C. MHIS 120 Introduction to World Musical Styles (3)  
D. MHIS 145-146, 245-246 Theory and Aural Skills I-IV (16)  
E. MHIS 321, 322 Music History I, II (6) |

| Total | 27 |

| IV. Supportive courses | A. Supportive courses  
- APPL 320 Applied Lessons Secondary Instrument (3)  
- APPM 274 Keyboard Skills and APPM 373-374 Advanced Keyboard Skills (3)  
- APPM 375 Score Reading (1) (offered as a private lesson; requires an override)  
- MHIS 305 Form and Analysis I (2)  

B. Music electives (12)  
Selected from APPM 365, 366 Aural Skills V, VI and any MHIS or MUSC 300- or 400-level course not otherwise required in the student’s curriculum |

| Total | 21 |

| Voice Credits | 41 |

I. General studies  
A. University core  
- MATH 131 or STAT 208 (quantitative literacy) (3)  
- UNIV 111 and 112 Focused Inquiry I and II (6)  
- UNIV 200 Writing and Rhetoric or equivalent (research and academic writing) (3)  
- Approved humanities/fine arts (3)  
- Approved natural/physical science (3)  
- Approved social/behavioral science (3)  

B. HIST 101 or 102 Survey of European History or HIST 103 or 104 Survey of American History (3)  
C. Directed electives  
Selected from humanities/fine arts, social/behavioral sciences, natural/physical sciences, mathematics (9)  
D. Open electives (9) |

| Total | 120 |

| Piano Credits | 35 |

I. General studies  
A. University core  
- MATH 131 or STAT 208 (quantitative literacy) (3)  
- UNIV 111 and 112 Focused Inquiry I and II (6)  
- UNIV 200 Writing and Rhetoric or equivalent (research and academic writing) (3)  
- Approved humanities/fine arts (3)  

B. HIST 101 or 102 Survey of European History or HIST 103 or 104 Survey of American History (3)  
C. Foreign language (Italian, French or German)  
- FRLG 101-102 Foreign Languages: ____ (8)  

D. Open electives (9) |

| Total | 120 |

<p>| Voice Credits | 41 |</p>
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>APPM 370</td>
<td>Large Ensembles (7)</td>
</tr>
<tr>
<td>APPM 370/390</td>
<td>Ensemble electives (at least 1 credit from 390) (3)</td>
</tr>
<tr>
<td>APPM 385</td>
<td>Opera Theatre (2)</td>
</tr>
<tr>
<td>APPM 463</td>
<td>Pedagogy (vocal) (2)</td>
</tr>
<tr>
<td>APPM 492</td>
<td>Senior Project: Portfolio Review (1)</td>
</tr>
<tr>
<td>APPM 299</td>
<td>Master Class (eight semesters) (0)</td>
</tr>
<tr>
<td>APPM 394</td>
<td>Junior Recital (0)</td>
</tr>
<tr>
<td>APPM 494</td>
<td>Senior Recital (0)</td>
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### III. Music core curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>APPM 381</td>
<td>Conducting (2)</td>
</tr>
<tr>
<td>APPM 199</td>
<td>Recital/Convocation Attendance (four semesters) (0)</td>
</tr>
<tr>
<td>MHIS 120</td>
<td>Introduction to World Musical Styles (3)</td>
</tr>
<tr>
<td>MHIS 145-146, 245-246</td>
<td>Theory and Aural Skills I-IV (16)</td>
</tr>
<tr>
<td>MHIS 321, 322</td>
<td>Music History I, II (6)</td>
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### IV. Supportive courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>APPM 381</td>
<td>Conducting (2)</td>
</tr>
<tr>
<td>APPM 173-174</td>
<td>Keyboard Skills (2)</td>
</tr>
<tr>
<td>APPM 272</td>
<td>Jazz Piano for the Non-keyboard Player (0/1)</td>
</tr>
<tr>
<td>MHIS 147</td>
<td>Jazz Theory and Aural Skills (3)</td>
</tr>
<tr>
<td>MHIS 311 and 312</td>
<td>Jazz Arranging I and II (6)</td>
</tr>
<tr>
<td>MHIS 380</td>
<td>Survey of the Music Industry (3)</td>
</tr>
<tr>
<td>MHIS 405</td>
<td>Jazz Form and Analysis (3)</td>
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</table>

Total: 120/121

### Bachelor of Music/music education

#### I. General studies

<table>
<thead>
<tr>
<th>Component</th>
<th>Credits</th>
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<tbody>
<tr>
<td>A. University core</td>
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<tr>
<td>MATH 131 or STAT 208</td>
<td>(3)</td>
</tr>
<tr>
<td>UNIV 111 and 112</td>
<td>Focused Inquiry I and II (6)</td>
</tr>
<tr>
<td>UNIV 200</td>
<td>Writing and Rhetoric or equivalent (research and academic writing) (3)</td>
</tr>
<tr>
<td>Approved humanities/fine arts</td>
<td>(3)</td>
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<tr>
<td>Approved natural/physical science</td>
<td>(3)</td>
</tr>
<tr>
<td>Approved social/behavioral science</td>
<td>(3)</td>
</tr>
<tr>
<td>B. Directed electives</td>
<td>(6)</td>
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Total: 30

#### II. Major studies (applied)

<table>
<thead>
<tr>
<th>Component</th>
<th>Credits</th>
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<tbody>
<tr>
<td>APLL 311-314, 414-418</td>
<td>Applied Lessons (principal performing medium – jazz) (16)</td>
</tr>
<tr>
<td>APPM 370/390</td>
<td>Ensemble electives (3)</td>
</tr>
<tr>
<td>APPM 390</td>
<td>Ensemble (4 credits jazz orchestra, 5 credits small jazz ensembles) (9)</td>
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<tr>
<td>APPM 251 and 252</td>
<td>Jazz Improvisation I and II (6)</td>
</tr>
<tr>
<td>APPM 492</td>
<td>Senior Project: Portfolio Review (1)</td>
</tr>
<tr>
<td>APPM 299</td>
<td>Master Class (four semesters classical and four semesters jazz) (0)</td>
</tr>
<tr>
<td>APPM 394</td>
<td>Junior Recital (0)</td>
</tr>
<tr>
<td>APPM 494</td>
<td>Senior Recital (0)</td>
</tr>
</tbody>
</table>

#### III. Music core curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPM 381</td>
<td>Conducting (2)</td>
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Total: 27

#### IV. Supportive courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
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<tbody>
<tr>
<td>APPM 173-174</td>
<td>Keyboard Skills (2)</td>
</tr>
<tr>
<td>APPM 272</td>
<td>Jazz Piano for the Non-keyboard Player (0/1)</td>
</tr>
<tr>
<td>MHIS 147</td>
<td>Jazz Theory and Aural Skills (3)</td>
</tr>
<tr>
<td>MHIS 311 and 312</td>
<td>Jazz Arranging I and II (6)</td>
</tr>
<tr>
<td>MHIS 380</td>
<td>Survey of the Music Industry (3)</td>
</tr>
<tr>
<td>MHIS 405</td>
<td>Jazz Form and Analysis (3)</td>
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Total: 9

#### V. Music education/professional education

<table>
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<tr>
<th>Component</th>
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<tr>
<td>EDUS 301</td>
<td>Human Development and Learning (3)</td>
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<tr>
<td>MUED 301-307</td>
<td>Methods and Techniques (7)</td>
</tr>
<tr>
<td>MUED 380</td>
<td>Introduction to Music Education (2)</td>
</tr>
<tr>
<td>MUED 381</td>
<td>Methods and Practicum in Elementary Music Education (3)</td>
</tr>
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</table>

Total: 35/33
Music, Bachelor of Arts (B.A.)

The Bachelor of Arts (B.A.) in Music is designed for students who want a degree that combines a breadth of general studies with a major in music. Included are courses in basic theory, aural skills, applied performance, music history and foreign language, as well as restricted music electives, free electives and a minor in an area other than music.

**Emphasis within B.A. in Music**

- Applied music achievement levels
- Bachelor of Arts curricula

**Emphasis within B.A. in Music**

The B.A. in Music degree offers students the flexibility to create an emphasis in a specific area of music, such as performance, music history and literature, music business, or theory and composition. Such an emphasis may be created through elective choice, selecting among applied performance credits and restricted music electives, possibly in combination with the chosen minor field of study. For further information, students should consult the Department of Music Undergraduate Student Handbook and their music adviser.

**Applied music achievement levels**

Eight achievement levels have been established for applied instrumental and vocal study. These levels are explicit in terms of expected repertoire, musicianship/style, technique and sight-reading. While freshmen normally earn Level I at their first semester juries, transfer students may be awarded a higher level based on their entrance auditions. B.A. students must earn Level IV on a single instrument to fulfill their graduation requirements.

**Bachelor of Arts curricula**

<table>
<thead>
<tr>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>I. General studies</strong></td>
<td></td>
</tr>
<tr>
<td><strong>A. University core</strong></td>
<td></td>
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<tr>
<td>MATH 131 or STAT 208 (quantitative literacy)</td>
<td>(3)</td>
</tr>
<tr>
<td>UNIV 111 and 112 Focused Inquiry I and II</td>
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<tr>
<td>Approved humanities/fine arts</td>
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<td>Approved natural/physical science</td>
<td>(3)</td>
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<td>Approved social/behavioral science</td>
<td>(3)</td>
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<tr>
<td><strong>B. Directed electives</strong></td>
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<td><strong>C. Minor</strong></td>
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<td><strong>D. Foreign language</strong></td>
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<tr>
<td><strong>E. Open electives</strong></td>
<td>(6-14)</td>
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<table>
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<tbody>
<tr>
<td><strong>II. Major studies (applied)</strong></td>
<td></td>
</tr>
<tr>
<td>APPL 311-314 Applied Lessons (principal performing medium)</td>
<td>(8)</td>
</tr>
<tr>
<td>APPM 370 Large Ensembles or 390 Small Ensembles</td>
<td>(6)</td>
</tr>
<tr>
<td>APPM 492 Senior Project: Portfolio Review</td>
<td>(1)</td>
</tr>
<tr>
<td>APPM 299 Master Class (four semesters)</td>
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</table>

<table>
<thead>
<tr>
<th>Credits</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>III. Music core curriculum</strong></td>
<td></td>
</tr>
<tr>
<td>APPM 381 Conducting</td>
<td>(2)</td>
</tr>
<tr>
<td>APPM 199 Recital/Convocation Attendance (four semesters)</td>
<td>(0)</td>
</tr>
<tr>
<td>MHIS 120 Introduction to World Musical Styles</td>
<td>(3)</td>
</tr>
<tr>
<td>MHIS 145-146, 245-246 Theory and Aural Skills I-IV</td>
<td>(16)</td>
</tr>
<tr>
<td>MHIS 321, 322 Music History I, II</td>
<td>(6)</td>
</tr>
</tbody>
</table>

**Music, minor in**

Any VCU student may declare a minor in music with approval from the Department of Music. The music minor comprises 18 credits distributed among the areas of music history/theory, ensemble performance, private lessons and music electives. A music faculty adviser counsels every student about the selection of appropriate courses based on the student’s competence and interest. Depending on the availability of seats, students may select from the following courses to meet their minor requirements:

- Music history and theory selected from MHIS 105, 110, 145, 146, 243, 250, 321, 322 and 324 for a total of six credits.
- Large ensemble for four credits.
- Private lessons for four credits. One credit per semester; all credits to be earned on a single instrument. Students must earn Achievement Level I.
- Music electives for a total of four credits.

**Department of Painting and Printmaking**

The Department of Painting and Printmaking offers an undergraduate program that earns a Bachelor of Fine Arts in Painting and Printmaking, as well as a graduate program of study that leads to the Master of Fine Arts in Fine Arts. Students admitted to the programs are expected to have a high level of competence in either painting or printmaking. The graduate program is designed to encourage the development of professional attitudes and skills, with an emphasis on individual investigation.

The department is housed in the new Fine Arts Building with 15 individual graduate studios plus a large graduate printmaking area in addition four state-of-the-art undergraduate printmaking studios: etching, lithography, screenprinting, and digital. These new facilities provide an excellent physical environment for the programs with easy access to the other fine art areas of sculpture and crafts. Established in 1928, the Department of Painting and Printmaking was the first department in what has become the School of the Arts. For nearly 70 years, the department has made significant contributions to the development of the School of the Arts’ reputation as one of the premier art schools in the country.

The department supports an active and ambitious program of visiting artists and lecturers. Leading figures in the world of contemporary art visit to discuss their work, critique, visit studios, conduct workshops and meet with students throughout the year.

The Master of Fine Arts degree is the terminal degree in the studio areas of fine arts and is a requirement for most college and university teaching positions. Many graduate students have gained teaching experience in the department as part of their assistantship responsibilities, teaching classes in painting, drawing and printmaking. The department assists graduate students financially through a variety of teaching assistantships, graduate assistantships and scholarships.

**Administration**

Holly Morrison
Associate Professor and Department Chair
www.vcu.edu/arts
Painting and printmaking courses

The following graduate courses may be taken by undergraduates for degree credit: PAPR 525, 527 and 528. Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level. Unless otherwise indicated, courses must be taken in numerical sequence.

Follow this link to painting and printmaking (PAPR) courses.

Painting and Printmaking, Bachelor of Fine Arts (B.F.A.)

Faculty and students in the Department of Painting and Printmaking work together in a professional and creative learning environment. The undergraduate curriculum enables students to adopt a specialized focus within the discipline and use elective options to pursue other areas of interest in the School of the Arts, the university and the community. It also permits students to tailor a course of study suited to their professional and personal ambitions. The undergraduate program provides students with opportunities for concentrated experiences in both practice and theory as a foundation for independent exploration and artistic development. Classroom discussions invite students to examine a range of contemporary critical issues, which enable them to understand their own studio work in relation to historical continuum. As students develop their skills in critical analysis they are challenged to articulate and justify their ideas both visually and verbally.

The size and diversity of the faculty guarantee exposure to a plurality of ideas and stylistic approaches. In addition, the department’s visiting artist program brings to campus leading figures in the world of contemporary art for discussions of their work, critiques of student work and workshops.

Degree requirements in painting and printmaking

<table>
<thead>
<tr>
<th>University core</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIV 111 and 112 Focused Inquiry I and II</td>
<td>6</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric Workshop or equivalent</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/ fine arts</td>
<td>3</td>
</tr>
<tr>
<td>Approved natural/ physical science</td>
<td>3</td>
</tr>
<tr>
<td>Approved social/ behavioral science</td>
<td>3</td>
</tr>
<tr>
<td>Approved quantitative literacy</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General studies</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 103, 104 Survey of Western Art</td>
<td>6</td>
</tr>
<tr>
<td>Art history (200 level or above)</td>
<td>9</td>
</tr>
<tr>
<td>English (200 level or above)</td>
<td>6</td>
</tr>
<tr>
<td>Open electives (300-level or above studio or academic courses outside PAPR)</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Studio requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Foundation Program</td>
<td>14</td>
</tr>
</tbody>
</table>

Painting and printmaking program

Painting
PAPR 205 Painting, Basic | 4 |
PAPR 305 Painting, Intermediate | 4 |
PAPR 3xx or 4xx (painting) | 4 |

Printmaking
PAPR 209 Materials: Printmaking | 4 |
PAPR 31x Printmaking, Intermediate (etching, lithography, screenprinting or digital) | 4 |
PAPR 3xx or 4xx (printmaking) | 4 |
PAPR 3xx or 4xx (painting or printmaking) | 4 |

Drawing
PAPR 221 Drawing, Basic | 3 |
PAPR 321 Drawing, Intermediate | 3 |
PAPR 3xx or 4xx (drawing) | 3 |

Total credits | 120 |

Painting and printmaking, minor in

Successful completion of the Art Foundation Program is a prerequisite for the minor, which consists of at least 18 credits in painting and printmaking courses. Of these 18, at least nine credits must be in upper-level courses.

Department of Photography and Film

The Department of Photography and Film seeks to advance the highest standards of the media of photography and filmmaking by encouraging the creative and professional growth of both its students and faculty. The goal is to provide a forum for the development and exchange of visual ideas and to encourage its members to translate these ideas with a high degree of sensitivity and proficiency. The department fosters a pluralistic approach that allows both faculty and students to expand the traditional boundaries of the respective media, explore a broad range of conceptual orientations and engage in multidisciplinary practice.

The department offers undergraduate concentrations in photography and filmmaking resulting in a Bachelor of Fine Arts in Photography and Film, as well as a graduate program that leads to a Master of Fine Arts in Fine Arts with a concentration in photography and film.

To promote student development and research of contemporary art practice and theory, the Department of Photography and Film presents a diverse and active visiting artist program. Through lectures, critiques and research courses, students are exposed to the valuable insights of respected international artists, scholars and critics. In addition, the visiting artists teach topics courses exploring the current artistic and conceptual foundations found in their own work. Graduate students are encouraged to establish an individual critical dialogue with the visiting artists and faculty and attain a strong critical and historical basis for their work.

The facilities include several critique and screening rooms; a large black-and-white darkroom; a large state-of-the-art digital photography and film editing lab; a shooting studio; a student checkout center with a wide range of still photography and film cameras, professional lights and sound recording equipment; a professionally staffed graphics lab located in the same building that provides student with digital services on several high-tech imaging devices; and two large graduate workrooms.

Administration

John N. Heroy
Associate Professor and Interim Department Chair

www.vcu.edu/arts/photo

Photography and film courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to photography and film (PHTO) courses.

Photography and Film, Bachelor of Fine Arts (B.F.A.)

The Department of Photography and Film offers a variety of basic, intermediate and advanced photography and filmmaking classes leading to a Bachelor of Fine Arts in Photography and Film, with concentrations in filmmaking, photography, and photography and filmmaking.

Beginning courses cover fundamentals and techniques and develop the visual senses. Advanced courses expand on the student’s knowledge and help the student assemble a well-developed portfolio. Emphasis is placed on photography and filmmaking as fine arts. All students in the program work in narrative, documentary and experimental genres and learn both film-based and digital technology.
Admission criteria
Students seeking admission to the Bachelor of Fine Arts in Photography and Film degree program apply to the School of the Arts and enter the Art Foundation Program. During the final semester of the Art Foundation Program, students submit a portfolio application that is reviewed by the Department of Photography and Film.

Degree requirements
Completion of the program requires a minimum of 120 credits. Forty-five credits must be completed in 300-, 400- and/or 500-level courses. The final 30 credits must be completed at VCU. Students are strongly encouraged to meet with an adviser each semester to maintain the correct curriculum track toward graduation. For full application consideration, students must complete each course requirement of the Art Foundation Program with a minimum grade of C and have a minimum cumulative GPA of 2.0. Students who fail to meet these requirements may be dropped from the program. Special equipment is required. Students should contact the department or visit its Web site for a list of required equipment.

Curricula outlines

Photography curriculum

University core

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIV 111 and 112 Focused Inquiry I and II</td>
<td>6</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric or equivalent</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/fine arts</td>
<td>3</td>
</tr>
<tr>
<td>Approved social/behavioral science</td>
<td>3</td>
</tr>
<tr>
<td>Approved natural/physical science</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative literacy</td>
<td>3</td>
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</tbody>
</table>

General studies

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Art history</td>
<td>12</td>
</tr>
<tr>
<td>To include ARTH 103, 104, 270, 271 and 474</td>
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</tr>
</tbody>
</table>

Art Foundation studios

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>200-level PHTO classes</td>
<td>8</td>
</tr>
<tr>
<td>300- and 400-level PHTO classes</td>
<td>40</td>
</tr>
<tr>
<td>PHTO 420 Senior Portfolio (capstone)</td>
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</tbody>
</table>

Major requirements

Additional requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Open electives</td>
<td>12</td>
</tr>
<tr>
<td>Studio art elective</td>
<td>4</td>
</tr>
</tbody>
</table>

Total                120

Note: 45 credits in 300- to 500-level courses are required to graduate.

Filmmaking curriculum

University core

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIV 111 and 112 Focused Inquiry I and II</td>
<td>6</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric or equivalent</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/fine arts</td>
<td>3</td>
</tr>
<tr>
<td>Approved social/behavioral science</td>
<td>3</td>
</tr>
<tr>
<td>Approved natural/physical science</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative literacy</td>
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</table>

Degree requirements in sculpture

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIV 111 and 112 Focused Inquiry I and II</td>
<td>6</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric or equivalent</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/fine arts</td>
<td>3</td>
</tr>
<tr>
<td>Approved social/behavioral science</td>
<td>3</td>
</tr>
</tbody>
</table>
Approved natural/physical science  
Quantitative literacy  

**General studies**  
Art history  
ARTH 103, 104 Survey of Western Art  
3  
Art history (200 level or above)  
3  
Art history (300 level or above)  
3  
English  
ENGL 215 Textual Analysis  
3  
Literature (at least one 300 level or above)  
3  
Open electives  
14  

**Studio credits**  
Art Foundation Program  
14  
Sculpture  
SCPT 211 Sculpture  
4  
SCPT 212 Sculpture  
4  
SCPT 215 Sophomore Seminar  
2  
SCPT 311, 312 Sculpture  
8  
SCPT 411, 412 Sculpture  
8  
SCPT 415 Senior Seminar (capstone)  
2  
Directed upper-level sculpture course*  
4  
Directed sculpture electives**  
4  
Studio courses from any School of the Arts department other than Sculpture***  
14  
Total  
120  

* Select from SCPT 323, 324, 411, 412, 417 or 480.  
** Select from SCPT 290, 321, 322, 323, 324, 480, 491 or 591.  
*** 6 credits must be upper-level.  
45 credits must be upper-level.

**Sculpture, minor in**  
Successful completion of the Art Foundation Program is a prerequisite for the minor in sculpture. The minor consists of a minimum of 18 credits and must include the following courses, in order:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCPT 211 Basic Sculpture I</td>
<td>4</td>
</tr>
<tr>
<td>SCPT 212 Basic Sculpture II</td>
<td>4</td>
</tr>
<tr>
<td>SCPT 311 or SCPT 312 Intermediate Sculpture</td>
<td>4</td>
</tr>
<tr>
<td>SCPT 411 or SCPT 412 Advanced Sculpture</td>
<td>4</td>
</tr>
<tr>
<td>SCPT upper-level</td>
<td>2-4</td>
</tr>
</tbody>
</table>

**Department of Theatre**  
The mission of the Department of Theatre is to educate and train students as theatre professionals and/or academicians in the field of performance, design/technology or theatre pedagogy.  
In fulfilling its mission, the Department of Theatre provides students with the professional and cultural foundations essential for achieving the highest standards of the art. The department offers three degrees — a Bachelor of Arts, a Bachelor of Fine Arts and a Master of Fine Arts — to which applicants are admitted based on demonstration of ability, genuine interest determined during an interview, and audition and/or portfolio presentation.  
In addition to introductory theatre and acting courses for non-majors, the department also serves students throughout the university with offerings in speech communication.  
The Department of Theatre employs 23 faculty and staff and enrolls 230 undergraduate and 40 to 50 full-time graduate students. Theatre VCU produces four mainstage productions and numerous graduate and undergraduate directing projects each year.  

**Theatre courses**  
With permission of instructor, the following graduate courses may be taken by undergraduates for degree credit: THEA 501-502, THEA 505-506, THEA 508 and THEA 513-514. Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vucourses. You may search by unit, subject or keyword, as well as by degree level. Unless otherwise indicated, courses must be taken in numerical sequence.  
The Department of Theatre offers courses in the following areas:  
Use this link to see theatre (THEA) courses.  
Use this link to see theatre laboratory (THEZ) courses.  
Use this link to see speech (SPCH) courses.  

**Theatre, Bachelor of Arts (B.A.)**  
The department offers a Bachelor of Arts in Theatre that may be entered into during the third year. All freshman and transfer students entering the Department of Theatre are initially classified as Theatre Foundation students. After successfully completing the first two years of core theatre courses in their foundation areas of emphasis, students apply for admission into a specific degree program (B.F.A. or B.A.) in theatre. The B.A. is designed for students who want a program with a strong emphasis in theatre combined with a strong liberal arts component, and a minor (or other course of directed study) in an area other than theatre.  
Student participation in both credit- and noncredit-bearing department activities will be required. Students matriculating in School of the Arts degree programs are bound by the policies and procedures stipulated in this bulletin and in any other current handbook or policy document adopted by the individual programs.  
Because of the environment that exists in the Department of Theatre, all aspects of theatre as art, craft, business and education are experienced together. The curriculum immerses students in the practicalities of theatre. Throughout the four years, students work with voice, body and imagination; this practical application, combined with a strong liberal arts component and a minor (or course of directed study), offers a wide field of academic and human experience.  

**Degree requirements — Bachelor of Arts in Theatre**  
Students wishing to pursue the B.A. will declare their intention at the end of their sophomore Foundation year. Students will then be given a new departmental advising guide and all courses will be transferred to the new degree track.  

**First and second year (B.F.A. shared Foundation)**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 103 or 104 Survey of Western Art</td>
<td>3</td>
</tr>
<tr>
<td>THEA 103 Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THEA 104 Costume Construction</td>
<td>3</td>
</tr>
<tr>
<td>THEA 113 Acting I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 114 Acting I or SPCH 121 Effective Speech</td>
<td>3</td>
</tr>
<tr>
<td>THEA 201-202 Stage Voice and Speech or equivalent in Art Foundation, design, stage management or theatre practicum electives</td>
<td>3-3</td>
</tr>
<tr>
<td>THEA 203-204 Movement for the Actor or equivalent in Art Foundation, design or stage management electives</td>
<td>3-3</td>
</tr>
<tr>
<td>THEA 211-212 Introduction to Drama</td>
<td>3-3</td>
</tr>
<tr>
<td>THEA 213-214 Acting II or equivalent in Art Foundation, design or stage management electives</td>
<td>3-3</td>
</tr>
<tr>
<td>THEA 227 Basic Stage Costuming and Makeup or THEA 221 Introduction to Scene Design or THEA 228 Basic Stage Costuming and Makeup or THEA 229 Introduction to Lighting Design</td>
<td>3</td>
</tr>
<tr>
<td>MATH 131 or STAT 208 (university core)</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 111 and 112 Focused Inquiry I and II (university core)</td>
<td>3-3</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric (university core)</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/fine arts (university core)*</td>
<td>3</td>
</tr>
<tr>
<td>Approved natural/physical science (university core)*</td>
<td>3</td>
</tr>
<tr>
<td>Approved social/behavioral science (university core)*</td>
<td>3</td>
</tr>
</tbody>
</table>

---

Administration  
David Leong  
Professor and Department Chair  
www.vcu.edu/arts/theatre  

Aaron Anderson  
Assistant Chair and Director of Undergraduate Studies  

---
The Department of Theatre offers a Bachelor of Fine Arts in Theatre that may be entered into during the third year. All freshman and transfer students entering the department are initially classified as Theatre Foundation students. After successfully completing the first two years of core theatre courses in their foundation areas of emphasis, students apply for admission to a specific degree program (B.F.A. or B.A.). The department offers B.F.A concentration areas in performance and stage management; as well as three areas of design/technology: scenic, lighting and costume. (See the individual specialization/concentration pages for curricula outlines.)

Student participation in both credit- and noncredit-bearing department activities may be required. Students matriculating in School of the Arts degree programs are bound by the policies and procedures stipulated in this bulletin and in any other current handbook or policy document adopted by the individual programs.

Because of the environment that exists in these preprofessional programs, all aspects of theatre as art, craft, business and education are experienced together. The curriculum immerses students in the practicalities of theatre. Throughout the four years, the performer works daily with voice, body and imagination, while the designer/technician is involved in studio classes and practical application. Prospective theatre educators engage in intensive teacher-training activities that lead to certification.

### Theatre, Bachelor of Fine Arts (B.F.A.)

<table>
<thead>
<tr>
<th>Credits</th>
<th>Core credits</th>
<th>63</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL XXX (Shakespeare or other play-reading)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>THEA/AFAM 303 Black Theatre, THEA 403 or 404 History of Dramatic Literature; or THEA 423 or 424 Modern Drama</td>
<td>3-3</td>
<td></td>
</tr>
<tr>
<td>THEA 307-308 History of the Theatre</td>
<td>3-3</td>
<td></td>
</tr>
<tr>
<td>THEA 300-level practicum (if equivalence hours not yet met)</td>
<td>0-6</td>
<td></td>
</tr>
<tr>
<td>THEA 3XX or 4XX upper-level elective*</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>THEA 415 The Business of Theatre (capstone)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Approved humanities/fine arts, natural/physical science or social/behavioral science electives*</td>
<td>3-3</td>
<td></td>
</tr>
<tr>
<td>Electives (emphasis in minor area or directed course of study; consult with academic adviser)*</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Foreign language*</td>
<td>3-3</td>
<td></td>
</tr>
<tr>
<td><strong>Additional credits</strong></td>
<td>57</td>
<td></td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td>120</td>
<td></td>
</tr>
</tbody>
</table>

* A minimum of 45 upper-level (300- to 500-) courses are needed to graduate. Electives should be chosen in consultation with an adviser.

### Costume design/technical production emphasis

<table>
<thead>
<tr>
<th>Credits</th>
<th>First year, fall semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 103 Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THEA 113 Acting I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 211 Introduction to Drama</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 111 Focused Inquiry I (university core)</td>
<td>3</td>
</tr>
<tr>
<td>ARTF technical laboratory electives</td>
<td>1</td>
</tr>
<tr>
<td>Approved natural/physical science elective* (university core)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

### First year, spring semester

<table>
<thead>
<tr>
<th>Credits</th>
<th>THEA 104 Costume Construction</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>THEA 212 Introduction to Drama</td>
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<tr>
<td></td>
<td>UNIV 112 Focused Inquiry II (university core)</td>
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<td><strong>Total credits</strong></td>
<td>12</td>
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</table>

### Second year, fall semester

<table>
<thead>
<tr>
<th>Credits</th>
<th>THEA and THEZ 227 Basic Stage Costuming and Makeup and Laboratory</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>THEA 309 History of Costumes</td>
<td>3</td>
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<tr>
<td></td>
<td>THEA 328 Draping and Patternmaking for the Theatre</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ARTF technical laboratories</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Electives*</td>
<td>3</td>
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<tr>
<td><strong>Total credits</strong></td>
<td>17</td>
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### Second year, spring semester

<table>
<thead>
<tr>
<th>Credits</th>
<th>THEA and THEZ 228 Basic Stage Costuming and Makeup and Laboratory</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>THEA 310 History of Costumes</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>THEA 329 Draping and Patternmaking for the Theatre</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>UNIV 200 Writing and Rhetoric Workshop (university core)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ARTF technical laboratories</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Electives*</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td>16</td>
<td></td>
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</table>

### Third year, fall semester

<table>
<thead>
<tr>
<th>Credits</th>
<th>THEA 221 Introduction to Scene Design</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>THEA 307 History of the Theatre</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>THEA 403 or 404 History of Dramatic Literature or THEA 423 or 424 Modern Drama or THEA 303 Black Theatre</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Approved humanities/fine arts, natural/physical science or social/behavioral science elective*</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Design electives*</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td>15</td>
<td></td>
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</tbody>
</table>

### Third year, spring semester

<table>
<thead>
<tr>
<th>Credits</th>
<th>THEA 229 Introduction to Lighting Design</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>THEA 308 History of the Theatre</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Approved social/behavioral science elective* (university core)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Design electives*</td>
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<td><strong>Total credits</strong></td>
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### Fourth year, fall semester

<table>
<thead>
<tr>
<th>Credits</th>
<th>THEA 3XX or THEA 4XX upper-level theatre elective*</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td></td>
<td>Electives*</td>
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</tr>
<tr>
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<td>300- or 400-level elective*</td>
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### Fourth year, spring semester

<table>
<thead>
<tr>
<th>Credits</th>
<th>MATH 131 or STAT 208 (university core)</th>
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<tbody>
<tr>
<td></td>
<td>THEA 495 Senior Project: Portfolio Review (capstone)</td>
<td>1</td>
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<td></td>
<td>Design electives*</td>
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<td></td>
<td>Elective*</td>
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<tr>
<td><strong>Total credits</strong></td>
<td>13</td>
<td></td>
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</table>
* Design electives are to be decided with a faculty adviser. They may include the following classes: THEA 305-306 Advanced Scene Design I-II; THEA 305 and 306 Advanced Scene Design III and IV; THEA 508 Scene Painting; THEA 321, 322 Research Techniques for Costume Design; THEA 325 Stage Management Practicum/THEA 429 Advanced Lighting Design/THEA 327 Theatrical Drafting or THEA 407 Advanced Scenic Technique. Design electives also may consist of classes in other departments of the School of the Arts such as sculpture, furniture building, jewelry, architecture and interior design.

† Students, in consultation with their adviser, may elect to have one semester of their senior year as a professional internship at an approved theater.

+A minimum of 45 upper-level credits are needed to graduate.

Note: All costume design majors are required to work in the costume shop on the shows produced by Theatre VCU. This provides the opportunity to put into practice those skills learned in classes. Those assignments will be determined by the faculty supervisor. Students may be asked to act as a design assistant for a faculty designer or to design one aspect of one of Theatre VCU’s seasons. This opportunity may be taken as a senior seminar or as a design elective.

### Lighting design/technical production emphasis

#### First year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 103 Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THEA 113 Acting I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 121 Introduction to Drawing</td>
<td>2</td>
</tr>
<tr>
<td>THEA 211 Introduction to Drama</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 111 Focused Inquiry I (university core)</td>
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<td><strong>Total</strong></td>
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#### First year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH 131 or STAT 208 (university core)</td>
<td>3</td>
</tr>
<tr>
<td>THEA 122 Color Theory</td>
<td>2</td>
</tr>
<tr>
<td>THEA 212 Introduction to Drama</td>
<td>3</td>
</tr>
<tr>
<td>THEA and THEZ 229 Introduction to Lighting Design and Laboratory</td>
<td>4</td>
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<tr>
<td>UNIV 112 Focused Inquiry II (university core)</td>
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<td><strong>Total</strong></td>
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#### Second year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ARTH 103 or 104 Survey of Western Art</td>
<td>3</td>
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<tr>
<td>THEA 221 Introduction to Scene Design</td>
<td>3</td>
</tr>
<tr>
<td>THEA and THEZ 225 Basic Stage Electronics – Lighting and Laboratory</td>
<td>4</td>
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<td>THEA 323 Practicum in Advanced Theatre Technology</td>
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<td>Elective†</td>
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<td><strong>Total</strong></td>
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#### Second year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>THEA 104 Costume Construction</td>
<td>3</td>
</tr>
<tr>
<td>THEA 324 Practicum in Advanced Stage Lighting</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric Workshop (university core)</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/fine arts elective† (university core)</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/fine arts, natural/physical science or social/behavioral science elective†</td>
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<tr>
<td><strong>Total</strong></td>
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#### Third year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>THEA 227 Basic Stage Costuming and Makeup</td>
<td>3</td>
</tr>
<tr>
<td>THEA 307 History of the Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA 323 Practicum in Advanced Theatre Technology</td>
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<tr>
<td>THEA 327 Theatrical Drafting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 403 or 404 History of Dramatic Literature or THEA 423 or 424 Modern Drama or THEA 303 Black Theatre</td>
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<td><strong>Total</strong></td>
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#### Fourth year, fall semester†

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>THEA and THEZ 429 Advanced Lighting Design and Laboratory</td>
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<tr>
<td>Approved humanities/fine arts, natural/physical science or social/behavioral science elective†</td>
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<tr>
<td>Approved natural/physical science elective† (university core)</td>
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<tr>
<td>Electives‡</td>
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<td><strong>Total</strong></td>
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#### Total credits

<table>
<thead>
<tr>
<th>Credits</th>
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<tbody>
<tr>
<td>120</td>
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</table>

* Design electives are to be decided with a faculty adviser.

† Students, in consultation with their adviser, may elect to have one semester of their senior year as a professional internship at an approved theater.

+A minimum of 45 upper-level credits are needed to graduate.

Note: All lighting design majors are required to work on the shows produced by Theatre VCU. This provides the opportunity to put into practice those skills learned in classes. Those assignments will be determined by the faculty supervisor. Students may be asked to act as a design assistant for a faculty designer or to significantly contribute to one or more assignments for Theatre VCU’s seasons. This opportunity may be taken as a senior seminar or as a design elective.

### Scene design/technical production emphasis

#### First year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 103 Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THEA 113 Acting I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 211 Introduction to Drama</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 111 Focused Inquiry I (university core)</td>
<td>3</td>
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<td><strong>Total</strong></td>
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#### First year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 104 Costume Construction</td>
<td>3</td>
</tr>
<tr>
<td>THEA 212 Introduction to Drama</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry II (university core)</td>
<td>3</td>
</tr>
<tr>
<td>ARTF technical laboratory electives</td>
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</tr>
<tr>
<td>Approved humanities/fine arts elective† (university core)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</table>
Second year, fall semester

ARTH 103 or 104 Survey of Western Art or any non-Western art history 3
MATH 131 or STAT 208 (university core) 3
THEA 221 Introduction to Scene Design 3
THEA 223 Practicum in Theatre Technology or THEA 323 Practicum in Advanced Theatre Technology* 3
Design electives** 3

Second year, spring semester

ARTH 103 or ARTH 104 Survey of Western Art or any non-Western art history 3
THEA 224 Practicum in Theatre Technology or THEA 323 Practicum in Advanced Theatre Technology* 3
THEA 229 Introduction to Lighting Design 3
UNIV 200 Writing and Rhetoric (university core) 3
Design electives** 3

Third year, fall semester

THEA 221 Introduction to Scene Design 3
THEA 227 Basic Stage Costuming and Makeup 3
THEA 351 Rehearsal and Performance 3
THEA 432 or THEA 433 or THEA 434 or THEA 435 Stage Management 3
Elective+ 3

Third year, spring semester

THEA 228 Basic Stage Costuming and Makeup 3
THEA 308 History of the Theatre 3
THEA 323 Practicum in Advanced Theatre Technology* 3
Approved social/behavioral science elective+ (university core) 3
Design electives** 3

Fourth year, fall semester†

THEA 3XX or THEA 4XX upper-level theatre elective+ 3
Design electives** 3
Electives+ 6
300- or 400-level electives+ 3

Fourth year, spring semester‡

THEA 495 Senior Project: Portfolio Review (capstone) 1
Design electives** 6
Electives+ 7

Total credits 120

* Practicum courses consist of working in the Scene Shop under the supervision of the technical director during the second and third years. This requirement may be accompanied by morning teaching sessions in the skills required.

** Design electives are to be chosen with advice from your faculty adviser. They may include the following classes: THEA 305-306 Advanced Scene Design I-II; THEA 505 and 506 Advanced Scene Design III and IV; THEA 508 Scene Painting; THEA 321, 322 Research Techniques for Costume Design; THEA 325 Stage Management Practicum/THEA 429 Advanced Lighting Design/THEA 327 Theatrical Drafting or THEA 407 Advanced Scenic Technique. Electives also may consist of classes from other departments of the School of the Arts such as sculpture, furniture building, jewelry, architecture and interior design.

†Students, in consultation with their adviser, may elect to have one semester of their senior year as a professional internship at an approved theater.

‡A minimum of 45 upper-level credits are needed to graduate.

Note: All scenic design majors are required to work in the Scene Shop on the shows produced by Theatre VCU. This provides the opportunity to put into practice those skills learned in classes. Those assignments will be determined by the faculty supervisor. Students may be asked to act as a design assistant for a faculty designer or to design one aspect of one of Theatre VCU’s seasons. This opportunity may be taken as a senior seminar or as a design elective.

Stage management/technical production emphasis

First year, fall semester

THEA 103 Stagecraft 3
THEA 113 Acting I 3
THEA 251 Rehearsal and Performance 3
THEA 325 Stage Management Practicum 3
UNIV 111 Focused Inquiry I (university core) 3
ARTF technical laboratory electives+ 1

First year, spring semester

THEA 104 Costume Construction 3
THEA 252 Rehearsal and Performance 3
THEA 325 Stage Management Practicum 3
UNIV 112 Focused Inquiry II (university core) 3
ARTF technical laboratory electives 1
Approved humanities/fine arts, natural/physical science or social/behavioral science elective+ 3

Second year, fall semester

ARTH 103 or 104 Survey of Western Art 3
THEA 211 Introduction to Drama 3
THEA 251 Rehearsal and Performance 3
THEA 432 or THEA 433 or THEA 434 or THEA 435 Stage Management 3
UNIV 200 Writing and Rhetoric (university core) 3

Second year, spring semester

MATH 131 or STAT 208 (university core) 3
THEA 212 Introduction to Drama 3
THEA 432 or THEA 433 or THEA 434 or THEA 435 Stage Management 3
Approved humanities/fine arts elective+ (university core) 3
Approved social/behavioral science elective+ (university core) 3

Third year, fall semester

THEA 221 Introduction to Scene Design 3
THEA 227 Basic Stage Costuming and Makeup 3
THEA 351 Rehearsal and Performance 3
THEA 432 or THEA 433 or THEA 434 or THEA 435 Stage Management 3
Elective+ 3
Third year, spring semester
THEA 228 Basic Stage Costuming and Makeup 3
THEA 229 Introduction to Lighting Design 3
Approved natural/physical science elective (university core) 3
Approved humanities/fine arts, natural/physical science or social/behavioral science elective 3
Elective 3

Total credits 15

Fourth year, fall semester+
THEA 307 History of the Theatre 3
THEA 361 Directing 3
THEA 403 or 404 History of Dramatic Literature or THEA 423 or 424 Modern Drama or THEA 303 Black Theatre 3
THEA 451 Rehearsal and Performance 3
Elective 3

Total credits 15

Fourth year, spring semester+
THEA 308 History of the Theatre 3
THEA 362 Directing 3
THEA 495 Senior Project: Portfolio Review 1
Approved humanities/fine arts, natural/physical science or social/behavioral science elective 3
Elective 3

Total credits 13

Total credits 120

All stage management students are required to work on Theatre VCU productions. This provides the opportunity to put into practice those skills learned in classes. Those assignments will be determined by the faculty supervisor. Students will be asked to serve as assistant stage manager or production stage manager under a faculty or guest director during Theatre VCU's season.

† Students, in consultation with their adviser, may elect to have one semester of their senior year as a professional internship at an approved theatre.

‡ A minimum of 45 upper-level credits are needed to graduate. Note: All stage management students are required to have and maintain current CPR/first aid certification through the Red Cross or other certifying organization. Such certifications typically are current for only one year for CPR to three years for first aid.

Performance emphasis

Performance emphasis

First year, fall semester (Foundation: introduction/overview)
THEA 103 Stagecraft 3
THEA 113 Acting I 3
THEA 211 Introduction to Drama 3
UNIV 111 Focused Inquiry I (university core) 3
Approved humanities/fine arts elective (university core) 3

Elective

Total credits 15

First year, spring semester (Foundation: introduction/overview)

THEA 104 Costume Construction 3
THEA 114 Acting I 3
THEA 212 Introduction to Drama 3
UNIV 112 Focused Inquiry II (university core) 3
Approved social/behavioral science elective (university core) 3

Elective

Total credits 15

Second year, fall semester (Foundation: building blocks of craft)
THEA 201 Stage Voice and Speech 3
THEA 203 Movement for the Actor 3
THEA 213 Acting II 3
THEA and THEZ 227 Basic Stage Costuming and Makeup and Laboratory 4
UNIV 200 Writing and Rhetoric Workshop (university core) 3

Total credits 16

Second year, spring semester (Foundation: building blocks of craft)
ARTH 103 or 104 Survey of Western Art or any non-Western art history 3
THEA 202 Stage Voice and Speech 3
THEA 204 Movement for the Actor 3
THEA 214 Acting II 3
Approved natural/physical science elective (university core) 3

Total credits 15

Third year, fall semester (advanced building blocks: periods, places, styles)*
THEA 301 Advanced Stage Voice and Speech 3
THEA 303 Black Theatre, THEA 403 or 404 History of Dramatic Literature or THEA 423 or 424 Modern Drama 3
THEA 307 History of the Theatre 3
THEA 311 Advanced Movement for the Actor 3
THEA 313 Actor’s Studio I 3

Total credits 15

Third year, spring semester (advanced building blocks: periods, places, styles)*
MATH 131 or STAT 208 (university core) 3
THEA 302 Advanced Stage Voice and Speech* 3
THEA 308 History of the Theatre 3
THEA 312 Advanced Movement for the Actor* 3
THEA 314 Actors Studio I* 3

Total credits 15

Fourth year* (integration and application)
THEA 412 Acting for Camera* 3
THEA 415 The Business of the Theatre* 4
THEA 3XX or THEA 4XX upper-level theatre electives* 12
Approved humanities/fine arts, natural/physical science or social/behavioral science elective 3
300- or 400-level elective (university core) 3
Electives 4

Total credits 29

* Because training is cumulative and safety is an issue in certain courses (both physical safety, as in stage combat, and emotional safety, as in advanced acting studios), students will not be allowed to enroll in certain advanced courses until
they are able to demonstrate an advanced level of proficiency in basic skills. These courses include THEA 302 (prerequisite 301), 312 (prerequisite 311), 314, 315, 413, 414, 415 and 441 (all prerequisite 313). In order to enroll in these advanced classes, students must first earn a B or better in the specified prerequisite course (or, in the case of extenuating circumstances, otherwise gain permission from the instructor).

† Students also may elect, with consultation and approval from their adviser, to have one semester of their senior year as a professional internship at an approved theatre or equivalent study abroad.

+ A minimum of 45 upper-level credits are needed to graduate.

Theatre education emphasis

The Department of Theatre currently is not accepting applications to this concentration.

First year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 103 Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THEA 113 Acting I</td>
<td>3</td>
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<tr>
<td>THEA 211 Introduction to Drama</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 111 Focused Inquiry I (university core)</td>
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<tr>
<td>Approved natural/physical science elective</td>
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<tr>
<td>Approved humanities/fine arts, natural/physical science or social/behavioral science elective</td>
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First year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH 131 or STAT 208 (university core)</td>
<td>3</td>
</tr>
<tr>
<td>THEA 104 Costume Construction</td>
<td>3</td>
</tr>
<tr>
<td>THEA 114 Acting I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 212 Introduction to Drama</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry II (university core)</td>
<td>3</td>
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<tr>
<td>Approved social/behavioral science elective</td>
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Second year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ENGL 215 Textual Analysis (university core)</td>
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<td>THEA 201 Stage Voice and Speech</td>
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<td>THEA 221 Introduction to Scene Design</td>
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<tr>
<td>THEA 227 Basic Costume Design and Makeup</td>
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<td>THEA 229 Introduction to Lighting Design</td>
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Second year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL 205 or 206 American Literature I or II or ENGL 203 or 204 British Literature I or II</td>
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<td>Approved humanities/fine arts, natural/physical science or social/behavioral science elective</td>
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<td>THEA 202 Stage Voice and Speech</td>
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<td>UNIV 200 Writing and Rhetoric (university core)</td>
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<td>English elective (linguistics or grammar)</td>
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Third year, fall semester

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<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>EDUS 300 Foundations of Education</td>
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<td>EDUS 301 Human Development and Learning</td>
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<td>THEA/AFAM 303 Black Theatre or THEA 403 or 404 History of Dramatic Literature or THEA 423 or 424 Modern Drama</td>
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<tr>
<td>THEA 307 History of the Theatre</td>
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<tr>
<td>THEA 361 Directing</td>
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Third year, spring semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>TEDU/ENGL 389 Teaching Writing Skills</td>
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<tr>
<td>THEA/AFAM 303 Black Theatre or THEA 403, 404 History of Dramatic Literature or THEA 423, 424 Modern Drama</td>
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<tr>
<td>Literature or THEA 423, 424 Modern Drama</td>
<td>3</td>
</tr>
<tr>
<td>THEA 308 History of the Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA 362 Directing</td>
<td>3</td>
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<tr>
<td>English (Shakespeare or other play reading)</td>
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</tbody>
</table>

Fourth year, fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
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<td>TEDU 310 Practicum (English)</td>
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<td>TEDU 310 Practicum (secondary)</td>
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<tr>
<td>TEDU 537 Secondary School Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>TEDU 548 Teaching Secondary School English</td>
<td>3</td>
</tr>
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<td>Approved humanities/fine arts, natural/physical science or social/behavioral science elective</td>
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Fourth year, spring semester

<table>
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<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>TEDU 485 Directed Student Teaching I</td>
<td>6</td>
</tr>
<tr>
<td>TEDU 486 Directed Student Teaching II (capstone)</td>
<td>6</td>
</tr>
</tbody>
</table>

Total credits: 120

School of the Arts in Qatar

P.O. Box 8095
Doha, Qatar
(+974) 492 7200
Fax: (+974) 480 5432
www.qatar.vcu.edu

Funded by the Qatar Foundation for Education, Science and Community Development

Allyson Vanstone
Professor of Graphic Design and Dean

William McGee
Chief Administration Officer

Valerie Jeremijenko
Assistant Dean for Student Affairs

Founded in 1998 as a collaboration between the Qatar Foundation for Education, Science and Community Development and Virginia Commonwealth University School of the Arts, the School of the Arts in Qatar offers the baccalaureate degrees in art history, fashion design, graphic design, interior design, and painting and printmaking. Its purpose is to provide special educational opportunities preparing graduates for leadership roles in the design professions. Courses emulate those offered on VCU’s Monroe Park Campus. Graduates are prepared for exciting careers in these growing fields.

VCU School of the Arts obtained the appropriate approvals from the VCU Board of Visitors and the State Council of Higher Education for Virginia and admitted the first class to what would become VCU School of the Arts in Qatar in fall 1998. The State Council of Higher Education for Virginia approved the request in April 2001 and forwarded its recommendation to the Governor and General Assembly. The 2002 General Assembly adopted legislation authorizing VCU to establish a campus in Qatar.
Degree programs
Baccalaureate programs within the School of the Arts in Qatar prepare students for careers in the following departments:

- Art history
- Fashion design
- Graphic design
- Interior design
- Painting and printmaking

The School of the Arts in Qatar offers a design studies track within the Master of Fine Arts in Design program. See additional details in this Bulletin or contact the School of the Arts in Qatar for more information.

Art history
The Bachelor of Arts in Art History is a liberal arts program composed of an academic course of study exposing the student to the scholarship, theoretical perspectives and research methods of not only the history of art, but related disciplines in the humanities. Courses focus on cultures, historical periods and regions. The program also includes possibilities for directed research projects as well as museum internships. This curriculum provides students the best possible background for future graduate work in art history.

In addition to the requirements for application to the School of the Arts, applicants to the art history program must submit as a writing sample a research paper in the humanities not to exceed 20 pages. For additional information please see the department’s website at www.vcu.edu/arts/arthistory/dept.

Art history majors must earn a minimum grade of C in each ARTH course to be applied to the curriculum requirements.

Degree requirements for art history degree

<table>
<thead>
<tr>
<th>University core requirements (21 credits)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIV 111 Focused Inquiry I</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry II</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/fine arts</td>
<td>3</td>
</tr>
<tr>
<td>Approved natural/physical sciences</td>
<td>3</td>
</tr>
<tr>
<td>Approved quantitative literacy</td>
<td>3</td>
</tr>
<tr>
<td>Approved social/behavioral sciences</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose credits from any of the following subject areas: ANTH, GEOG, HIST or RELS</td>
<td>9</td>
</tr>
</tbody>
</table>

Program requirements (27 credits)

<table>
<thead>
<tr>
<th>ENGL 215 Textual Analysis</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARAB, FREN, ITAL, SPAN or GERM 202 (intermediate readings)</td>
<td>3</td>
</tr>
<tr>
<td>Fine arts studio (CRAF, PAPR)</td>
<td>6</td>
</tr>
<tr>
<td>HIST (any)</td>
<td>12</td>
</tr>
<tr>
<td>HIST 300-level</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major requirements (42 credits)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 105 and 106 Survey of World Art or ARTF 115 and 116</td>
<td>6</td>
</tr>
<tr>
<td>Art History Survey</td>
<td></td>
</tr>
<tr>
<td>ARTH 200- to 500-level</td>
<td>30</td>
</tr>
<tr>
<td>ARTH 390 Art Historical Methods or PHIL 421 Aesthetics</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 490, 493 or 497 (capstone)</td>
<td>3</td>
</tr>
</tbody>
</table>

| Open VCU electives (21 credits) | 21 |

Total | 120 |

Fashion design

Freshman year, fall semester

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 115 Art History Survey</td>
</tr>
<tr>
<td>ARTF 131 Drawing Studio</td>
</tr>
<tr>
<td>ARTF 132 Surface Research</td>
</tr>
<tr>
<td>ARTF 139 Project</td>
</tr>
<tr>
<td>MATH 131 Introduction to Contemporary Math (university core – quantitative literacy)</td>
</tr>
<tr>
<td>UNIV 101 Introduction to the University</td>
</tr>
<tr>
<td>UNIV 111 Focused Inquiry I (university core)</td>
</tr>
</tbody>
</table>

Total | 17 |

Freshman year, spring semester

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 116 Art History Survey</td>
</tr>
<tr>
<td>ARTF 133 Space Research</td>
</tr>
<tr>
<td>ARTF 134 Time Studio</td>
</tr>
<tr>
<td>ARTF 139 Project</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry II (university core)</td>
</tr>
<tr>
<td>Approved social/behavioral science (university core)</td>
</tr>
</tbody>
</table>

Total | 16 |

Sophomore year, fall semester

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 201 Construction Techniques</td>
</tr>
<tr>
<td>FASH 203 Patternmaking</td>
</tr>
<tr>
<td>FASH 205 Fashion Drawing I</td>
</tr>
<tr>
<td>FASH 290 Textiles for the Fashion Industry</td>
</tr>
<tr>
<td>General education elective</td>
</tr>
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</table>

Total | 15 |

Sophomore year, spring semester

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 202 Draping</td>
</tr>
<tr>
<td>FASH 204 Patternmaking</td>
</tr>
<tr>
<td>FASH 206 Fashion Drawing I</td>
</tr>
<tr>
<td>FASH 370 Design History: 20th and 21st Centuries</td>
</tr>
<tr>
<td>FASH 391 Fashion Workshop (fashion show production)</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric (university core – research and academic writing)</td>
</tr>
</tbody>
</table>

Total | 16 |

Junior year, fall semester

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 215 Textual Analysis (university core – humanities/fine arts)</td>
</tr>
<tr>
<td>FASH 301 Design I Studio</td>
</tr>
<tr>
<td>FASH 319 Contemporary Fashion</td>
</tr>
<tr>
<td>FASH 350 Fashion Promotion</td>
</tr>
<tr>
<td>FASH 403 Design Theory and Illustration I</td>
</tr>
</tbody>
</table>

Total | 15 |

Junior year, spring semester

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 388 Writing in the Workplace</td>
</tr>
<tr>
<td>FASH 302 Design I Studio</td>
</tr>
<tr>
<td>FASH 330 The Business of Design</td>
</tr>
<tr>
<td>FASH 343 Fashion Forecasting</td>
</tr>
<tr>
<td>FASH 391 Fashion Workshop (fashion show production)</td>
</tr>
<tr>
<td>FASH 404 Design Theory and Illustration II</td>
</tr>
</tbody>
</table>

Total | 16 |

Senior year, fall semester

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Undergraduate Bulletin 2012-13
FASH 401 Design II Studio 3
FASH 403 Design Theory and Illustration I 3
FASH 490 Fashion Seminar (five weeks) 1
Approved natural/physical science (university core) 4
Open elective 3

Senior year, spring semester
FASH 391 Fashion Workshop (fashion show production) 1
FASH 402 Design II Studio 3
FASH 404 Design Theory and Illustration II 3
FASH 493 Fashion Internship 1-3
General education elective 3

Total credits 11-13

Graphic design

FASH 403 Design Theory and Illustration I 3
FASH 490 Fashion Seminar (five weeks) 1
Approved natural/physical science (university core) 4
Open elective 3

Senior year, spring semester
FASH 391 Fashion Workshop (fashion show production) 1
FASH 402 Design II Studio 3
FASH 404 Design Theory and Illustration II 3
FASH 493 Fashion Internship 1-3
General education elective 3

Total credits 11-13

Junior year, spring semester
ENGL 215 Textual Analysis (university core – humanities/fine arts) 3
GDES 365 Print II 3
GDES 366 Visual Narrative II 3
GDES 367 Interaction II 3
GDES 492 Design Internship 3

Total credits 15

Senior year, fall semester
ENGL 388 Writing in the Workplace 3
GDES 470 Senior Seminar 3
GDES 491 Studio Topics in Design 3
General education elective 3

Total credits 15

Interior design

Freshman year, fall semester
ARTF 115 Art History Survey 3
ARTF 131 Drawing Studio 3
ARTF 132 Surface Research 3
ARTF 139 Project 1
MATH 131 Introduction to Contemporary Math (university core – quantitative literacy) 3
UNIV 101 Introduction to the University 1
UNIV 111 Focused Inquiry I (university core) 3

17

Freshman year, spring semester
ARTF 116 Art History Survey 3
ARTF 133 Space Research 3
ARTF 134 Time Studio 3
ARTF 139 Project 1
UNIV 112 Focused Inquiry II (university core) 3
Approved social/behavioral science (university core) 3

16

Sophomore year, fall semester
GDES 202 Design Technology I 3
GDES 205 Design Methods and Processes 3
GDES 211 Typography I 3
GDES 214 Imaging I 3
GDES 252 History of Visual Communication 3

15

Sophomore year, spring semester
GDES 204 Design Technology II 3
GDES 212 Design Form and Communication 3
GDES 213 Intermediate Typography 3
GDES 216 Imaging II 3
UNIV 200 Writing and Rhetoric (university core – research and academic writing) 3

15

Junior year, fall semester
GDES 291 Studio Topics in Design: Design Technology III 3
GDES 345 Print I 3
GDES 346 Visual Narrative I 3
GDES 347 Interaction I 3
General education elective 3

15

Senior year, spring semester
GDES 472 Senior Studio 3
GDES 491 Studio Topics in Design 3
Approved natural/physical science elective (university core) 4
Elective 3

13

Total credits 121

105
### Sophomore year, spring semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>IDES 202</td>
<td>Introductory Interior Design Studio II</td>
<td>4</td>
</tr>
<tr>
<td>IDES 212</td>
<td>Interior Graphics II</td>
<td>3</td>
</tr>
<tr>
<td>IDES 311</td>
<td>Advanced Interior Graphics I</td>
<td>3</td>
</tr>
<tr>
<td>IDES 321</td>
<td>Interior Materials and Textiles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General education elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total credits</strong></td>
<td><strong>16</strong></td>
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</table>

### Junior year, fall semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENGL 215</td>
<td>Textual Analysis (university core – humanities/fine arts)</td>
<td>3</td>
</tr>
<tr>
<td>IDES 301</td>
<td>Interior Design Studio I</td>
<td>4</td>
</tr>
<tr>
<td>IDES 312</td>
<td>Advanced Interior Graphics II</td>
<td>3</td>
</tr>
<tr>
<td>IDES 323</td>
<td>Light and Color in Interior Environments</td>
<td>3</td>
</tr>
<tr>
<td>IDES 422</td>
<td>Building Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits</strong></td>
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</table>

### Junior year, spring semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 388</td>
<td>Writing in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>IDES 302</td>
<td>Interior Design Studio II</td>
<td>4</td>
</tr>
<tr>
<td>IDES 370</td>
<td>Design History: 20th and 21st Centuries</td>
<td>3</td>
</tr>
<tr>
<td>IDES 421</td>
<td>Construction Documents</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General education elective</td>
<td></td>
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<td></td>
<td><strong>Total credits</strong></td>
<td><strong>16</strong></td>
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</table>

### Senior year, fall semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>IDES 330</td>
<td>The Business of Design</td>
<td>3</td>
</tr>
<tr>
<td>IDES 400</td>
<td>Senior Interior Design Studio I</td>
<td>4</td>
</tr>
<tr>
<td>IDES 441</td>
<td>Senior Seminar I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Approved social/behavioral science (university core)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits</strong></td>
<td><strong>12</strong></td>
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</table>

### Senior year, spring semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDES 401</td>
<td>Senior Interior Design Studio II</td>
<td>4</td>
</tr>
<tr>
<td>IDES 442</td>
<td>Senior Seminar II</td>
<td>2</td>
</tr>
<tr>
<td>IDES 493</td>
<td>Interior Design Internship</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Art/design open elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

### Total credits

122

### Painting and printmaking

#### Freshman year, fall semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 131</td>
<td>Drawing Studio</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 132</td>
<td>Surface Research</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 139</td>
<td>Project</td>
<td>1</td>
</tr>
<tr>
<td>ARTF 115</td>
<td>Art History Survey*</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 111</td>
<td>Focused Inquiry I (university core)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Approved quantitative literacy (university core)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits</strong></td>
<td><strong>16</strong></td>
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</table>

#### Freshman year, spring semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 133</td>
<td>Space Research</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 134</td>
<td>Time Studio</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 139</td>
<td>Project</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Senior year, fall semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAPR 205</td>
<td>Painting, Basic</td>
<td>4</td>
</tr>
<tr>
<td>PAPR 221</td>
<td>Drawing, Basic</td>
<td>4</td>
</tr>
<tr>
<td>PAPR 290</td>
<td>Concepts and Issues</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 200</td>
<td>Writing and Rhetoric or equivalent (university core)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Approved humanities/fine arts (university core)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Senior year, spring semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAPR 305</td>
<td>Printmaking, Intermediate</td>
<td>4</td>
</tr>
<tr>
<td>PAPR 321</td>
<td>Drawing, Intermediate</td>
<td>3</td>
</tr>
<tr>
<td>SCPT 211</td>
<td>Basic Sculpture I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Art history</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Sculpture or craft studio elective</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Total credits

120

*Satisfies freshman art history requirement*

### Admission

Admission policies for VCU School of the Arts in Qatar are the same as those in effect for VCU School of the Arts in Richmond with minor exceptions that
recognize the culture and heritage of applicants from the Gulf region. Applications must include the following requirements:

1. The Qatari General Secondary Education Certificate or equivalent certificate from an accredited high school. Students applying from the British system must submit the results of their GCSE.

2. A working knowledge of English. Official Test of English as a Foreign Language scores are to be submitted with the application. Students whose TOEFL scores do not qualify them for admission are recommended to an academic bridge program (see below).

3. The VCU International Application for Admission.

4. The art and design portfolio (either in photographic slide portfolio or electronic format) or drawing and design portfolio. See admission guidelines for programs requiring specialized supplementary information in the "Admission to the University" section of this bulletin.

5. The application fee.

The high school certificate (or college transcript), official TOEFL score, the completed application form and the portfolio are all required in order to be considered for admission. These and all other application materials become the confidential property of VCU School of the Arts in Qatar.

Admission to the School of the Arts in Qatar is granted on a competitive basis. A score of 500 or higher on the TOEFL exam is required for admission.

Conditional acceptance is offered to students who do not present a TOEFL score of 500 based on an exceptional high school record and portfolio. Conditional students must repeat the TOEFL during the foundation year, score a minimum of 500 and earn passing grades in order to proceed to the second year.

Evaluation of transcripts

Applicants applying for transfer credit from a postsecondary institution will have their transcripts reviewed for possible acceptance of transfer credits. Faculty and administrative committees determine placement in all upper level courses after evaluating the student’s record and portfolio of course work.

Mathematics placement test

All incoming students are required to take the mathematics placement test.

Internships

Students of the VCU School of the Arts in Qatar are required to complete internship course work for which university credit is offered. These placements are under the supervision of faculty members within the major.

Academic requirements

All degree programs in the School of the Arts in Qatar stipulate a minimum GPA requirement in the major concentration of at least 2.0.

Courses

Course descriptions of classes offered at the School of the Arts in Qatar may be found in the VCU Courses database at www.pubapps.vcu.edu/vcucourses; you may search by academic unit, subject area or keyword.
Virginia Commonwealth University’s School of Business can be traced back to 1917 when a board of private citizens organized the Richmond School of Social Economy for Social Workers and Public Health Nurses. By 1937 the school was called the Richmond Professional Institute, was affiliated with The College of William and Mary, and had added business courses to the curriculum. The school began offering a graduate program in 1962. Since then, the program has continued to develop and mature to meet the needs of the future.

**Vision**
The vision of the VCU School of Business is to be nationally recognized as the leading technologically focused school of business in the commonwealth of Virginia.

**Mission**
The mission of the VCU School of Business is to prepare students for successful careers and lifelong learning by providing management education firmly grounded in technology, interdisciplinary teamwork and global perspectives. Essential to achieving this mission is striving to excel in teaching and scholarly research, and to build effective, value-based relationships with the external community.

**Administration**
301 West Franklin Street
P.O. Box 84400
Richmond, Virginia 23284-4000
(804) 828-1595
Fax (804) 828-8884
www.business.vcu.edu

- **Ed Grier**
  Dean

- **David J. Urban**
  Executive Associate Dean

- **José Dulá**
  Interim Associate Dean for Research and Doctoral Studies

- **Shannon K. Mitchell**
  Associate Dean for Undergraduate Studies

- **Jana P. McQuaid**
  Assistant Dean for Master’s Program

- **William J. Miller**
  Executive Director, Fast Track Executive M.B.A. Program

**Accreditation**
The School of Business is accredited by the Association to Advance Collegiate Schools of Business, which accredits programs of professional education in business at the collegiate level. AACSB International accreditation represents the highest standard of achievement for business schools, worldwide. Institutions that earn accreditation confirm their commitment to quality and continuous improvement through a rigorous and comprehensive peer review. AACSB International accreditation is the hallmark of excellence in management education.

The School of Business is the first school of business in the nation to gain accreditation from the Accreditation Board for Engineering and Technology (ABET) for its undergraduate program in information systems.

**Financial aid, scholarships and awards**

**Scholarships and awards**
In addition to university scholarships, business students may apply and compete for scholarships awarded through School of Business endowed scholarship funds or through the various School of Business academic programs. For detailed information on scholarships and awards, visit the School of Business Web site.

**Cooperative Education and internships**
Business students are eligible for the university’s Cooperative Education Program. Qualified students placed with an employer will either alternate one semester of full-time study with one semester of full-time work or combine study with part-time work during the same semester. The School of Business also offers internships, allowing advanced students to pursue part-time work assignments with area employers.

**Assistantships**
The School of Business offers a limited number of graduate assistantships to full-time students for the academic year. For further information, write to the Graduate Studies in Business Office.

Graduate students also are eligible for funds administered under the National Defense Loan and college work-study programs. For further information, write to Director of Financial Aid, Virginia Commonwealth University, Richmond, VA 23284-2526.

**Undergraduate information**

**Undergraduate programs**
The school offers undergraduate baccalaureate degree programs in accounting, business, economics, financial technology, information systems, real estate and marketing, each of which earns a Bachelor of Science.

Post-baccalaureate undergraduate certificates in accounting, human resource management, information systems, marketing, and real estate and urban land development are also offered, as well as minors in general business and human resource management.

A minor in economics is offered by the L. Douglas Wilder School of Government and Public Affairs. Business majors (other than economics) are eligible for this minor. See the program listing for more information.

Programs, degree levels and specializations are outlined below.

**Bachelor of Science**

**Accounting**
*Business*
- Business administration and management
  - Business administration
  - Entrepreneurship and small business management
  - International management
- Finance
  - Finance
  - Financial planning
  - Insurance-risk management
- Human resource management

**Economics**

**Financial technology**

**Marketing**

**Real estate**

**Post-baccalaureate undergraduate certificates**

**Accounting**

**Human resource management**

**Information systems**

**Marketing**

**Real estate and urban land development**

**Undergraduate certificate**

International management studies (interdisciplinary program with School of World Studies)

**Minors**

- **General business**
- **Human resource management**
General requirements for undergraduate business degrees

To complete a degree, a minimum of 120 credits is required, with no more than four of those credits in physical education, and no more than another four credits from INFO 160, 161, 162, 163, 165, 166, 167, 168 and 169. The foundation program specifies course work required during the freshman and sophomore years. Students who successfully complete a minimum of 54 credits in the foundation program — including UNIV 111 and 112 (with a minimum of C grade in UNIV 112), UNIV 200, ECON 210-211, MGMT 171 and 212 and ACCT 203-204 — and meet the course and GPA requirements are eligible for admission into a major in the School of Business.

The advanced program details the course requirements for students admitted to a major in the school. Candidates for the bachelor’s degrees offered in business must complete the 120 credits outlined in the combination of the foundation and advanced programs. At least 30 hours of the required business courses for the Bachelor of Science must be taken at VCU.

Foundation program

<table>
<thead>
<tr>
<th>Credits</th>
<th>21*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General education requirements</td>
<td></td>
</tr>
<tr>
<td>ECON 210-211 Principles of Economics</td>
<td></td>
</tr>
<tr>
<td>MGMT 171 Mathematical Applications for Business</td>
<td></td>
</tr>
<tr>
<td>MGMT 212 Differential Calculus and Optimization for Business</td>
<td></td>
</tr>
<tr>
<td>MATH 211 Mathematical Structures (required only of information systems majors)*</td>
<td></td>
</tr>
<tr>
<td>UNIV 111 and 112 Focused Inquiry I and II</td>
<td></td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric</td>
<td></td>
</tr>
</tbody>
</table>

* Information systems majors must take a total of 24 credits.

<table>
<thead>
<tr>
<th>Credits</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. General education electives</td>
<td></td>
</tr>
<tr>
<td>a. Science</td>
<td></td>
</tr>
<tr>
<td>One course from the list of approved natural/physical sciences courses in Tier II of the Core Curriculum</td>
<td></td>
</tr>
<tr>
<td>b. Social sciences</td>
<td></td>
</tr>
<tr>
<td>One course from the list of approved social/behavioral sciences courses in Tier II of the Core Curriculum</td>
<td></td>
</tr>
<tr>
<td>c. Humanities</td>
<td></td>
</tr>
<tr>
<td>One course from the approved list of humanities/fine arts courses in Tier II of the Core Curriculum</td>
<td></td>
</tr>
<tr>
<td>d. Additional general education electives</td>
<td></td>
</tr>
<tr>
<td>Select remainder of 21 credits from any of the other courses listed above in (a) through (c) or from the following list. Accounting majors must take one political science course if they did not take political science to satisfy the social science requirement (b) above.</td>
<td></td>
</tr>
<tr>
<td>Any 200-level ENGL literature course</td>
<td></td>
</tr>
<tr>
<td>Any foreign language course</td>
<td></td>
</tr>
<tr>
<td>Any honors module</td>
<td></td>
</tr>
<tr>
<td>Any HIST, INTL*, PHIL, POLI or RELS course</td>
<td></td>
</tr>
<tr>
<td>Any ANTH, PSYC or SOCY course except PSYC 214</td>
<td></td>
</tr>
<tr>
<td>Applications of Statistics, which business majors cannot take for degree credit</td>
<td></td>
</tr>
<tr>
<td>Any ARTH, DANC, MHIS, or THEA course open to non-arts majors</td>
<td></td>
</tr>
<tr>
<td>CHEM 101-102 General Chemistry</td>
<td></td>
</tr>
<tr>
<td>GEOG/ENVS 105 Physical Geography</td>
<td></td>
</tr>
<tr>
<td>PHYS 101 Foundations of Physics</td>
<td></td>
</tr>
<tr>
<td>PHYS 107 Wonders of Technology</td>
<td></td>
</tr>
<tr>
<td>PHYS 201-202 General Physics</td>
<td></td>
</tr>
</tbody>
</table>

*Except INTL 493 International Studies Internship

<table>
<thead>
<tr>
<th>Credits</th>
<th>12*</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Non-School of Business electives</td>
<td></td>
</tr>
<tr>
<td>(Students are strongly encouraged to take SPCH 121 Effective Speech or SPCH 321 Speech for Business and the Professions.</td>
<td></td>
</tr>
</tbody>
</table>

MGMT 302 Business Statistics and a maximum of four credits from the INFO 160 series can be used as nonbusiness electives.

* Information systems majors take only 9 credits.

4. School of Business foundation core

<table>
<thead>
<tr>
<th>Credits</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 203-204 Introduction to Accounting</td>
<td></td>
</tr>
</tbody>
</table>

5. Business and/or nonbusiness electives

<table>
<thead>
<tr>
<th>Credits</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance majors must take MGMT 302 Business Statistics. All School of Business students entering junior-level business and economics courses are expected to have competency in computer-based word processing and spreadsheet skills.</td>
<td></td>
</tr>
</tbody>
</table>

Foundation total

63

Advanced program

<table>
<thead>
<tr>
<th>Credits</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. School of Business advanced core</td>
<td></td>
</tr>
<tr>
<td>ECON 303 Managerial Economics</td>
<td></td>
</tr>
<tr>
<td>FIRE 311 Financial Management</td>
<td></td>
</tr>
<tr>
<td>INFO 360 Business Information Systems</td>
<td></td>
</tr>
<tr>
<td>MGMT 301 Business Statistics</td>
<td></td>
</tr>
<tr>
<td>MGMT 319 Organizational Behavior</td>
<td></td>
</tr>
<tr>
<td>MGMT 320 Production/Operations Management</td>
<td></td>
</tr>
<tr>
<td>MGMT 323 Legal Environment of Business*</td>
<td></td>
</tr>
<tr>
<td>MGMT 325 Organizational Communication</td>
<td></td>
</tr>
<tr>
<td>MGMT 434 Strategic Management</td>
<td></td>
</tr>
<tr>
<td>MKTG 301 Introduction to Marketing</td>
<td></td>
</tr>
</tbody>
</table>

* Accounting majors must take ACCT/MGMT 481 Law for Accountants I in place of MGMT 323

<table>
<thead>
<tr>
<th>Credits</th>
<th>27</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Major requirements listed under the major requirement section of each department</td>
<td></td>
</tr>
</tbody>
</table>

Advanced program total

57

Baccalaureate programs total credits

120

Business Honors

Undergraduate business majors may earn business honors. Any student enrolled in the VCU Honors College and in the business foundation program or with a major within the School of Business is eligible to participate.

The mission of the Business Honors Program is to provide a challenging experience for high-ability School of Business students that boosts creativity, strategic thinking, teamwork and leadership in collaboration with the VCU Honors College.

The Business Honors Program produces exceptional business graduates who are prepared to excel in any environment of their choosing. It will achieve this by:

- Fostering a culture of intellectual curiosity and achievement
- Creating long-term, cohesive relationships within a community of highly motivated VCU students
- Partnering with local industry leaders to provide internships, seminars and professional mentoring

To earn business honors, students must complete business honors courses and fulfill all of the requirements to graduate with University Honors. Students who enter The Honors College with fewer than 54 credits must complete at least 15 credit hours of business honors courses. Students who enter The Honors College with 54 or more credit hours must complete at least 12 credit hours of business honors courses. Honors core requirements also vary depending on the number of credit hours earned at the time of admission to the VCU Honors College. Transfer students and freshmen are equally encouraged to apply. For complete details on honors program admission and graduation requirements, see www.honors.vcu.edu.

Current honors course offerings, including business honors courses are listed at: https://www.pubapps.vcu.edu/honors/academics/courses/index.aspx

Business honors graduates will be recognized at Commencement with special regalia, and the distinction “Business Honors” will be noted on the transcript.
Inquires should be directed to the Office of Undergraduate Studies in the School of Business in Room B-1100 of Snead Hall.

**Post-baccalaureate undergraduate certificates**

The School of Business at VCU offers post-baccalaureate undergraduate certificates in five areas: accounting, human resource management, information systems, marketing, and real estate and urban land development. These certificate programs are designed for individuals who hold bachelor’s degrees in other fields. By taking the courses required at the undergraduate level in one of the certificate concentrations, individuals are able to obtain an extensive knowledge of the subject.

Refer to individual program listings for certificate requirements.

**Application information**

Students cannot be accepted into a program until they have completed all the requirements for their bachelor’s degree and have achieved at least a 2.5 GPA in their undergraduate work. Applicants must submit an application and a nonrefundable fee of $30. In addition, two official transcripts (bearing the university seal) from the institution granting the bachelor’s degree should be sent directly to Graduate Studies in Business. International students also must submit current TOEFL scores and English translations of all transcripts. The deadlines for applications are:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Jul 15</td>
</tr>
<tr>
<td>Spring</td>
<td>Nov 15</td>
</tr>
<tr>
<td>Summer</td>
<td>Mar 15</td>
</tr>
</tbody>
</table>

1. Certificate recipients must have received an overall GPA of 2.5 (“C”) on credit hours attempted for the certificate at VCU. The grades of “D” and “F” are counted in computing the overall GPA but carry no credit.

2. Students who fail to register for at least one course per semester in the program will be automatically dropped from the program and must reapply for admission to continue in the program. At that time some or all of the courses completed prior to the reapplication may not be accepted toward the certificate.

If unusual circumstances warrant it, a leave of absence for one semester may be obtained by requesting such a leave in writing from the director of graduate programs as early as possible but no later than the end of the first week of registration of the semester in which the absence is expected to occur.

3. Grades of “A,” “B,” and “C” are passing grades; “D” is not a passing grade. Students who receive a grade of “D” or below on more than 20 percent of the credit hours attempted for the program will be terminated from the program.

4. Courses in which students have earned a grade of “D” or “F” must be repeated if these courses are needed for the program. Courses for which a passing grade was received cannot be repeated without written permission of the adviser and the director of graduate programs in business. The repeat course option in baccalaureate programs is not applicable to certificate programs.

5. Students who satisfy all the requirements except the 2.5 GPA may be allowed to take a maximum of six additional credit hours to raise the average. Students are required to get the approval of the adviser and the director of graduate programs in business.

6. Full-time certificate status consists of a minimum of 12 and a maximum of 18 undergraduate credits per semester.

7. Students must continually demonstrate acceptable professional behavior to be retained in the program.

8. All requirements for the certificate must be completed within five years from the date of admission or taking the first course in the program. This time limitation applies to both full- and part-time students. A maximum of two one-year extensions may be granted if satisfactory progress is demonstrated on the part of students requesting extensions. For extensions, write to the director of graduate programs in business.

9. The policies of the university regarding undergraduate degree programs will apply as the minimum when the certificate policy is not stated clearly in these policies. When in conflict, the stricter policy will apply in any case.

10. Students may not use the same course(s) for two certificates or the certificate and another program.

11. A maximum of six semester hours of acceptable undergraduate credit earned beyond the bachelor’s degree (and not applied toward other completed degrees or certificates) may be transferred and applied toward the certificate program requirements. Such credits will be evaluated for acceptance upon written request from the student after completion of nine semester hours of work at VCU. No transfer credit can be given for courses completed prior to awarding the bachelor’s degree regardless of whether the courses were taken beyond the minimum required for the bachelor’s degree program, unless prior written permission was given by the director of graduate programs in business.

Transfer credit is made at the discretion of the director of graduate programs in business upon the recommendation of the student’s adviser.

All transfer work must be at the “C” or higher grade level. Transfer credit must not be older than seven years at the time the certificate is awarded.

Credits to be earned at other institutions after acceptance in the program must be approved in advance, and approval is granted at the discretion of the director of graduate programs in business. Such work is approved under very unusual circumstances such as a job transfer to a new location more than 100 miles from Richmond.

12. CLEP examination credit is not given for the certificate programs.

13. All students admitted to a certificate program are assigned advisers. Students are required to work with their advisers to plan their certificate programs. Each student program or changes thereto must be approved by both the adviser and the director of graduate programs in business. Courses taken prior to approval are taken at the student’s own risk. Each student is required to complete an approved program form and file it with the Graduate Studies in Business Office no later than the end of the first semester in which the student is admitted. Failure to do so may result in dismissal from the program.

14. Students cannot be accepted in the certificate programs until they have completed all the requirements for their bachelor’s degrees.

15. Students must apply to graduate using the Graduation Application Form. For deadlines, consult the university calendar.

16. Students appeals for exceptions to policies or academic standards may be made in writing to Virginia Commonwealth University, Director of Graduate Programs, School of Business, Richmond, VA 23284-4000.

**Academic policies**

- Admission guidelines and deadlines
- Enrollment in business courses
- Limitation on total credits earned by nonbusiness majors
- Transfer policies
- Student advising
- Double majors

**Admission guidelines and deadlines**

Students applying to the School of Business should have completed four years of high school mathematics and must follow the application submission dates for the university as stated in the “Admission to the University” section of this bulletin. School of Business degree programs are organized into two components — the foundation program and the advanced program.

Freshmen are admitted initially into the business foundation program. Business foundation students must apply for admission to the advanced program (and a major) and be accepted at the end of the semester in which they attempt at least their 60th credit hour, including transfer credits. Attempted hours include credit hours from courses in which a W, an F or any other grade has been assigned. This is reported in the transcript as “overall attempted hours.” Details of minimum admission requirements for the advanced program can be found in the “General requirements for undergraduate business degrees” section of this Bulletin.

Transfer students are admitted into the business foundation program by the Office of Undergraduate Admissions. Transfer students who are eligible for the advanced program and a major (based on transfer course work) apply during New Student
Orientation. Those transfer students not immediately admitted to the advanced program and a major will enter as business foundation students. They must apply to the advanced program and a major following the minimum number of semesters needed to complete the general requirements and the school’s core courses, as detailed in "General requirements for undergraduate business degrees."

VCU students in other programs with fewer than 30 earned credit hours who wish to change to a business major follow the same admission deadlines as students admitted to the business foundation program as freshmen. VCU students with 30 or more earned hours at the time of the change of major follow the same admission guidelines and deadlines as transfer students.

Students who have not met admission requirements for the advanced program by the deadlines described above will be separated from the business program and asked to seek a major outside of the School of Business. This in itself does not preclude the student from completing another major at VCU, including the economics major offered through the College of Humanities and Sciences.

Students may appeal the separation via the associate dean for undergraduate studies in the School of Business. The associate dean may, at his or her discretion, extend the time period needed to meet the requirements, generally by only one semester. If this extension is not granted and the student wishes to appeal the associate dean’s decision, the appeal will be heard by the School Undergraduate Programs Committee (SUPC), which may establish a subcommittee for this purpose.

Application to the advanced program and a major is made by filing a change of major request in the Office of Undergraduate Studies, Room B1100, Snead Hall. If approved, the change of major becomes effective at the beginning of the following semester.

Enrollment in business courses

All VCU students may enroll in freshman and sophomore business courses (all 100- and 200-level courses in the School of Business) provided prerequisites are met.

Only juniors, seniors and graduate students admitted to a major field within the university, nondegree-seeking degree holders, and non-degree-seeking transient students are eligible for enrollment in all upper-division courses (300- and 400-level courses in the School of Business). Non-degree-seeking degree holders and transient students may enroll in upper-level business courses on a space-available basis only. Students not eligible for all upper-level business courses may enroll in the following upper-division courses if the prerequisites are met:

- ACCT 405 Tax Accounting Principles
- FIRE 315 Personal Financial Planning
- FIRE 316 Principles of Real Estate
- FIRE 333 Risk and Insurance
- FIRE 428 Employee Benefit Planning
- FIRE/MGMT 444 Occupational Safety, Health and Security
- INFO 300 Information Technology Infrastructure
- INFO 350 Intermediate Programming
- MGMT 301-302 Business Statistics
- MGMT 323 Legal Environment of Business

Limitation on total credits earned by nonbusiness majors

The number of credits that nonbusiness majors may accumulate from enrollment in classes offered by the School of Business is limited to a maximum of 25 percent of the total credits required for graduation in their programs. Students who wish to present more than 25 percent of their course work in business and/or economics must be admitted to a major in the School of Business, must complete a minimum of 27 credits from the School of Business advanced program after acceptance into the major and must meet all graduation requirements of the school. This does not limit the number of courses in economics for economics majors in the College of Humanities and Sciences.

Transfer policies

In addition to meeting the general requirements of the university and the School of Business, transfer students who plan to enroll in an undergraduate program in business must comply with the following requirements:

1. Incoming transfer students who are otherwise qualified for admission to the advanced program will be evaluated based on the cumulative GPA they had at their previous institution(s). Once transfer students have completed courses at VCU, however, their admission to the advanced program is evaluated using their cumulative GPA at VCU.

2. Transfer of business and economics courses from two-year institutions is limited to courses offered by the School of Business in the lower division (freshman and sophomore years). An exception is made for statistics or business statistics courses that transfer to VCU as MGMT 301 or STAT 210 or higher. See the online VCU Transfer Guide for details.

3. For a course to be considered for acceptance into the advanced program, it must be completed in a business program that is accredited by AACSB International and is at a four-year university. Any other transfer request must be reviewed and approved by the associate dean for undergraduate studies or their designee.

4. Credits earned at other institutions carrying a grade of D are not accepted for transfer.

Student advising

Freshman business students are assigned an adviser in University College. All other business students are assigned an adviser in the Office of Undergraduate Studies to assist students in planning course work, becoming familiar with university services, interpreting university rules and procedures and clarifying career objectives. Students are also strongly encouraged to consult with faculty in their major field of study for detailed information on course content and career paths.

While the faculty of the School of Business provides information and advice, the student is ultimately responsible for knowing and satisfying the degree requirements of his or her program. Students should familiarize themselves with curriculum requirements, appropriate sequencing of courses and course prerequisites in the “General requirements for undergraduate business degrees,” and university academic regulations covered in the “Academic regulations and general degree requirements” sections of this bulletin.

Double majors

A double major fulfills the requirements of two majors concurrently. To earn a degree with a double major, the student must fulfill all the requirements of the degree programs of which the majors are a part. Students can declare a double major in the School of Business through the change of major process in the Office of Undergraduate Studies. The request for a double major should be approved before the student begins courses in the second major. For a second major in the School of Business, the student must complete all courses required for each major.

Only one course overlap is allowed in the major requirements.

Dual degree

It is possible to obtain a dual degree in two business majors at the same time, resulting in two diplomas.

Laptop computer requirement

Entering freshmen and transfer students are required to purchase a laptop computer capable of meeting School of Business specifications. Information on the minimum required laptop specifications and the required software can be obtained from the Technology section of the School of Business website.

School of Business courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pabapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

The School of Business offers courses in the following areas:

- Use this link to see accounting (ACCT) courses.
- Use this link to see e-business (EBUS) courses.
- Use this link to see economics (ECON) courses.
- Use this link to see finance, insurance and real estate (FIRE) courses.
- Use this link to see fast-track M.B.A. (FMBA) courses.
- Use this link to see information systems (INFO) courses.
- Use this link to see information technology systems (ISTM) courses.
- Use this link to see management (MGMT) courses.
Use this link to see marketing (MKTG) courses.

**Business, Bachelor of Science (B.S.)**

Various departments within the School of Business administer the majors that result in the Bachelor of Science in Business. See the General requirements for undergraduate business degrees for foundation and advanced program requirements and the individual concentrations for detailed curricular outlines.

### Business administration and management concentration

The major in business administration and management consists of three tracks that allow students to either pursue general study in business and management or to specialize in selected areas of management. The track in business administration provides a broad-based study of management and other business disciplines. The choices in the business administration track allow students flexibility in developing a program of study leading to a variety of entry-level positions in private and public organizations.

The entrepreneurship and small business track enables students to develop skills in working with small firms and eventually starting small firms of their own, as well as to gain knowledge of entrepreneurial concepts useful for a variety of positions in organizations of any size.

The track in international management allows students to pursue an interest in the global nature of today’s business world. Students enrolled in this track are encouraged to take advantage of a variety of opportunities available for international study within the university and abroad.

The major requirements of the program are outlined below. For details on the entire program, see the General requirements for business degrees section of this bulletin.

**Major requirements**

**Core courses**

- Business administration track
- Entrepreneurship and small business management track
- International management track

**Core courses**

- MGMT 302 Business Statistics
- MGMT 331 Human Resource Management
- MGMT 389 Managerial Skills Development

**Core total**

- 9 credits

Select one of the following 18-credit tracks.

**Business administration track**

- Decision tools requirement* (choose one)
- MGMT 339 Quantitative Solutions for Management
- MGMT 386 Introduction to Supply Chain Management
- MGMT 439 Introduction to Quality Management and Six Sigma

**Global requirement (choose one)**

- ECON/INTL 329 International Economics
- MGMT 329/INTL 327 Introduction to Intercultural Communication
- MGMT/INTL 418 International Management
- MKTG/INTL 320 International Marketing

**Approved finance or insurance elective (choose one)**

- FIRE 312 Intermediate Financial Management
- FIRE 314 Investments
- FIRE 316 Principles of Real Estate
- FIRE 333 Risk and Insurance

**Approved systems and marketing elective (choose one)**

- INFO 361 Systems Analysis and Design
- MKTG 346 Technology and the Management Process

**Entrepreneurship and small business management track**

**Credits**

- MGMT 386 Introduction to Supply Chain Management†
- MGMT 439 Introduction to Quality Management and Six Sigma
- MKTG 315 Buyer Behavior
- MKTG 340 Retail Management
- MKTG 435 Personal Selling and Sales Management
- MKTG 442 Services Marketing
- MKTG 450 Product Development and Management
- MKTG 493 Internship in Management

**Entrepreneurship and small business management track**

**Track total**

- 18 credits

* Students using MGMT 386 or 439 to satisfy the decision tools requirement may not use the same course as an approved management elective.

**International management track**

**Credits**

- ECON/INTL 329 International Economics
- MGMT 329/INTL 327 Introduction to Intercultural Communication
- MGMT/INTL 418 International Management

**Approved electives (choose three) – subject to prerequisites listed in course descriptions**

- FIRE 316 Principles of Real Estate
- FIRE 333 Risk and Insurance
- MGMT 334 Organizational Design and Effectiveness
- MGMT 346 Technology and the Management Process
- MGMT 350 Introduction to Project Management
- MGMT 365 Introduction to Supply Chain Management
- MGMT 422 Managing the Family Firm
- MGMT 439 Introduction to Quality Management and Six Sigma
- MKTG 315 Buyer Behavior
- MKTG 340 Retail Management
- MKTG 435 Personal Selling and Sales Management
- MKTG 442 Services Marketing
- MKTG 450 Product Development and Management
- MKTG 493 Internship in Management

**Approved management electives (choose two)**

- MGMT 321 Introduction to Entrepreneurship
- MGMT 334 Organizational Design and Effectiveness
- MGMT 350 Introduction to Project Management
- MGMT 386 Introduction to Supply Chain Management†
- MGMT 420 Seminar in Industrial Relations
- MGMT 433 Compensation Management
- MGMT 439 Introduction to Quality Management and Six Sigma
- MKTG 491 Topics in Management
- MKTG 493 Internship in Management

**Approved electives (choose two) – subject to prerequisites listed in course descriptions**

- FIRE 316 Principles of Real Estate
- FIRE 333 Risk and Insurance
- MGMT 334 Organizational Design and Effectiveness
- MGMT 346 Technology and the Management Process
- MGMT 350 Introduction to Project Management
- MGMT 365 Introduction to Supply Chain Management
- MGMT 422 Managing the Family Firm
- MGMT 439 Introduction to Quality Management and Six Sigma
- MKTG 315 Buyer Behavior
- MKTG 340 Retail Management
- MKTG 435 Personal Selling and Sales Management
- MKTG 442 Services Marketing
- MKTG 450 Product Development and Management
- MKTG 493 Internship in Management

**Approved electives (choose three) – subject to prerequisites listed in course descriptions**

- FIRE 316 Principles of Real Estate
- FIRE 333 Risk and Insurance
- MGMT 334 Organizational Design and Effectiveness
- MGMT 346 Technology and the Management Process
- MGMT 350 Introduction to Project Management
- MGMT 365 Introduction to Supply Chain Management
- MGMT 422 Managing the Family Firm
- MGMT 439 Introduction to Quality Management and Six Sigma
- MKTG 315 Buyer Behavior
- MKTG 340 Retail Management
- MKTG 435 Personal Selling and Sales Management
- MKTG 442 Services Marketing
- MKTG 450 Product Development and Management
- MKTG 493 Internship in Management

* Students who have received credit for SPCH 121 may not use SPCH 321 as an approved elective. Students using SPCH 321 as an approved track elective cannot use it as a nonbusiness elective in the business foundation program.

**Approved trade test* (choose one)**

- MGMT 435-436 New Venture Strategy and Initiation

**Approved electives (choose two)**

- MGMT 422 Managing the Family Firm
- MGMT 439 Introduction to Quality Management and Six Sigma
- MKTG 315 Buyer Behavior
- MKTG 340 Retail Management
- MKTG 435 Personal Selling and Sales Management
- MKTG 442 Services Marketing
- MKTG 450 Product Development and Management
- MKTG 493 Internship in Management

**Approved management electives (choose two)**

- MGMT 321 Introduction to Entrepreneurship
- MGMT 334 Organizational Design and Effectiveness
- MGMT 350 Introduction to Project Management
- MGMT 386 Introduction to Supply Chain Management†
- MGMT 420 Seminar in Industrial Relations
- MGMT 433 Compensation Management
- MGMT 439 Introduction to Quality Management and Six Sigma
- MKTG 491 Topics in Management
- MKTG 493 Internship in Management

**Approved electives (choose two) – subject to prerequisites listed in course descriptions**

- FIRE 316 Principles of Real Estate
- FIRE 333 Risk and Insurance
- MGMT 334 Organizational Design and Effectiveness
- MGMT 346 Technology and the Management Process
- MGMT 350 Introduction to Project Management
- MGMT 365 Introduction to Supply Chain Management
- MGMT 422 Managing the Family Firm
- MGMT 439 Introduction to Quality Management and Six Sigma
- MKTG 315 Buyer Behavior
- MKTG 340 Retail Management
- MKTG 435 Personal Selling and Sales Management
- MKTG 442 Services Marketing
- MKTG 450 Product Development and Management
- MKTG 493 Internship in Management

**Approved electives (choose three) – subject to prerequisites listed in course descriptions**

- FIRE 316 Principles of Real Estate
- FIRE 333 Risk and Insurance
- MGMT 334 Organizational Design and Effectiveness
- MGMT 346 Technology and the Management Process
- MGMT 350 Introduction to Project Management
- MGMT 365 Introduction to Supply Chain Management
- MGMT 422 Managing the Family Firm
- MGMT 439 Introduction to Quality Management and Six Sigma
- MKTG 315 Buyer Behavior
- MKTG 340 Retail Management
- MKTG 435 Personal Selling and Sales Management
- MKTG 442 Services Marketing
- MKTG 450 Product Development and Management
- MKTG 493 Internship in Management

* Students who have received credit for SPCH 121 may not use SPCH 321 as an approved elective. Students using SPCH 321 as an approved track elective cannot use it as a nonbusiness elective in the business foundation program.
The major in finance prepares students for graduate-level study of finance and for careers in corporate finance, the securities industry, banking, financial planning or insurance/ risk/management. Students choose a concentration in one of three tracks: finance, financial planning or insurance/risk/management. Students must receive a "C" or better in each of the major requirements and must have a GPA of 2.0 or better in the track courses.

Courses directly related to risk, insurance and employee benefits are approved for 42 Virginia insurance continuing-education credits for insurance agents. Contact the coordinator of insurance studies for further information.

Students in the financial planning track are urged to take modules in the VCU financial planning certificate program. A minimum grade of C in these modules, combined with successful completion of the degree requirements of the program in finance will allow the student to sit for the examination necessary to become a certified financial planner. Contact the chair of the department for further information.

The major requirements of the program are outlined below. For details on the entire program, see the General requirements for business degrees section of this bulletin.

** Major requirements

** Finance track

** Financial planning track

** Insurance and risk management track

### Finance concentration

The major in finance prepares students for graduate-level study of finance and for careers in corporate finance, the securities industry, banking, financial planning or insurance/risk/management. Students choose a concentration in one of three tracks: finance, financial planning or insurance/risk/management. Students must receive a “C” or better in each of the major requirements and must have a GPA of 2.0 or better in the track courses.

Courses directly related to risk, insurance and employee benefits are approved for 42 Virginia insurance continuing-education credits for insurance agents. Contact the coordinator of insurance studies for further information.

The major requirements of the program are outlined below. For details on the entire program, see the General requirements for business degrees section of this bulletin.

** Major requirements

** Finance track

** Financial planning track

** Insurance and risk management track

<table>
<thead>
<tr>
<th>Major requirements</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>FIRE 312 Intermediate Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 314 Investments</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 333 Risk and Insurance</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 437 Funds Management in Financial Institutions</td>
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<tr>
<td>Select one of the three tracks (below)</td>
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<tr>
<td>** Finance track</td>
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</tr>
<tr>
<td>FIRE 414 Security Analysis and Portfolio Management</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 416 International Financial Management</td>
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</tr>
<tr>
<td>FIRE 417 Cases in Financial Management</td>
<td>3</td>
</tr>
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<td>FIRE 455 Options, Futures and Swaps</td>
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<tr>
<td>** Approved finance elective:</td>
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</tr>
<tr>
<td>ACCT 303 Intermediate Accounting I</td>
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</tr>
<tr>
<td>ACCT 306 Cost Accounting</td>
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</tr>
<tr>
<td>ECON 307 Money and Banking</td>
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<tr>
<td>ECON 402 Business Cycles and Forecasting</td>
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<tr>
<td>FIRE/INTL 413 Comparative Financial Systems</td>
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<tr>
<td>FIRE 424 Property and Liability Insurance</td>
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<td>FIRE 426 Life and Health Insurance</td>
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<td>FIRE 429 Real Estate Finance</td>
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<td>FIRE 465 Managing Financial Risk</td>
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<tr>
<td>FIRE 491 Topics in Finance, Insurance and Real Estate</td>
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<tr>
<td>FIRE 493 Internship in Finance, Insurance and Real Estate</td>
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<tr>
<td>** Track total</td>
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<tr>
<td>** Financial planning track</td>
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<tr>
<td>FIRE 428 Employee Benefit Planning</td>
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<tr>
<td>** Approved financial planning elective:</td>
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</tr>
<tr>
<td>ACCT 303 Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 410 Advanced Tax Accounting</td>
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<tr>
<td>ECON 307 Money and Banking</td>
<td></td>
</tr>
<tr>
<td>ECON 402 Business Cycles and Forecasting</td>
<td></td>
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<tr>
<td>FIRE/INTL 416 International Financial Management</td>
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<tr>
<td>FIRE 417 Cases in Financial Management</td>
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<tr>
<td>FIRE 424 Property and Liability Insurance</td>
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<td>FIRE 426 Real Estate Finance</td>
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<tr>
<td>FIRE 455 Options, Futures and Swaps</td>
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<tr>
<td>FIRE 465 Managing Financial Risk</td>
<td></td>
</tr>
<tr>
<td>FIRE 491 Topics in Finance, Insurance and Real Estate</td>
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<tr>
<td>FIRE 492 Independent Study in Finance, Insurance and Real Estate</td>
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<tr>
<td>FIRE 493 Internship in Finance, Insurance and Real Estate</td>
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</tr>
<tr>
<td>MKTG 315 Buyer Behavior</td>
<td></td>
</tr>
<tr>
<td>MKTG 435 Personal Selling and Sales Management</td>
<td></td>
</tr>
<tr>
<td>MKTG 442 Services Marketing</td>
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<tr>
<td>** Track total</td>
<td>15</td>
</tr>
</tbody>
</table>

### Human resource management concentration

The major in human resource management gives students a broad overview of the knowledge base and applications used by professionals in the field. Students receive exposure to a wide range of topics reflecting the body of knowledge required for the Professional in Human Resources certification exam administered by the Human Resource Certification Institute. After graduation, students are prepared for employment in the public or private sector as HRM generalists or as specialists in HRM functions such as compensation management or employee benefits.

The major requirements of the program are outlined below. For details on the entire program, see the General requirements for business degrees section of this bulletin.

** Major requirements

<table>
<thead>
<tr>
<th>Major requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE 428 Employee Benefit Planning</td>
<td>3</td>
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<tr>
<td>** Approved human resource management elective:</td>
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<tr>
<td>ACCT 303 Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 410 Advanced Tax Accounting</td>
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</tr>
<tr>
<td>ECON 307 Money and Banking</td>
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<td>MKTG 442 Services Marketing</td>
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</tr>
<tr>
<td>** Track total</td>
<td>15</td>
</tr>
</tbody>
</table>
**Department of Accounting**

The future development of the accounting profession depends upon the quality of the educational foundation on which it rests. The Department of Accounting is committed to the support of professional accounting through the delivery of educational experiences directed toward practice and research that addresses the important policy issues of the day.

The mission of the department is to prepare students for careers in accounting, to interpret and expand accounting knowledge, and to render service to the profession and communities. The department does so by:

1. Providing a learning environment in which students are encouraged to interact with others in identifying and solving accounting and business problems.

2. Investigating, developing and sharing knowledge, which has the potential for significant influence on accounting, business and education.

3. Interacting with the accounting profession, the business community and the community at large.

**General business, minor in**

The minor in general business is for nonbusiness majors and consists of 18 credits. Students must attain a minimum cumulative GPA of 2.0 in these courses.

- **Foundation courses** – Students should take these courses first.
  - ACCT 202 Accounting for Non-business Majors
  - ECON 203 Introduction to Economics

- **Finance/insurance elective** – Choose one.
  - FIRE 311 Financial Management
  - FIRE 315 Personal Financial Planning
  - FIRE 316 Principles of Real Estate
  - FIRE 333 Risk and Insurance

- **General business electives** – Choose three.
  - INFO 360 Business Information Systems
  - MGMT 319 Organizational Behavior
  - MGMT 323 Legal Environment of Business
  - MKTG 301 Marketing Principles

* Requires departmental approval.
** Students planning to attend graduate school should complete MGMT 302 as either an approved or free elective.

- **Approved general management electives** (choose two)
  - FIRE 333 Risk and Insurance
  - MGMT 302 Business Statistics
  - MGMT 334 Organization Design and Effectiveness
  - MGMT 350 Introduction to Project Management
  - MGMT 389 Managerial Skills Development
  - MGMT 439 Introduction to Quality Management and Six Sigma
  - MGMT 491 Topics in Management*

- **Approved human resource electives** (choose three)
  - ECON 203 Introduction to Economics
  - ACCT 202 Accounting for Non-business Majors
  - FIRE/MGMT 444 Occupational Safety, Health and Security
  - MGMT 403 Management Control Systems
  - MGMT 402 Advanced Cost Accounting
  - MGMT 401 Governmental and Not-for-profit Accounting
  - MGMT 400 Management Control Systems
  - MGMT 403 Management Control Systems
  - MGMT 410 Advanced Tax Accounting

* Requires departmental approval.
** Students planning to attend graduate school should complete MGMT 302 as either an approved or free elective.

- **Course work in the certificate program is divided into two categories.**
  - Students must take these courses first.
  - Choose one.
  - Choose three.

- **Accounting electives**
  - Select two courses from the following:
    - ACCT 307 Accounting Systems
    - ACCT 305 Intermediate Accounting III
    - ACCT 306 Cost Accounting
    - ACCT 304 Intermediate Accounting II
    - ACCT 303 Intermediate Accounting I

- **Required accounting electives (from list below)**
  - ACCT 406 Auditing
  - ACCT 405 Tax Accounting Principles

- **Accounting, Certificate in (Post-baccalaureate undergraduate certificate)**

The Post-baccalaureate Undergraduate Certificate in Accounting is designed for individuals who want an extensive knowledge of accounting and hold bachelor’s degrees in other fields. Additionally, graduates are well-qualified to sit for the Uniform Certified Public Accountant Examination in Virginia. The program provides 150 hours prior to starting work. The focus of the undergraduate program is high quality and professional education at the foundation level with strong emphasis on financial accounting and auditing.

The major requirements of the program are outlined below. For details on the entire program, see the General requirements for business degrees section of this bulletin.

**Major requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACCT 303 Intermediate Accounting I</td>
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<td>ACCT 304 Intermediate Accounting II</td>
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</tr>
<tr>
<td>ACCT 305 Intermediate Accounting III</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 306 Cost Accounting</td>
<td>3</td>
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<td>ACCT 307 Accounting Systems</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 405 Tax Accounting Principles</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 406 Auditing</td>
<td>3</td>
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<tr>
<td><strong>Required accounting electives (from list below)</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Accounting electives</th>
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</thead>
<tbody>
<tr>
<td>ACCT 401 Governmental and Not-for-profit Accounting</td>
<td>3</td>
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<td>ACCT 402 Advanced Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 403 Management Control Systems</td>
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</tr>
<tr>
<td>ACCT 410 Advanced Tax Accounting</td>
<td>3</td>
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</tbody>
</table>

**Accounting, Certificate in (Post-baccalaureate undergraduate certificate)**

The Post-baccalaureate Undergraduate Certificate in Accounting is designed for individuals who want an extensive knowledge of accounting and hold bachelor’s degrees in other fields. Additionally, graduates are well-qualified to sit for the Uniform Certified Public Accountant Examination in Virginia. Candidates for the certificate are required to complete a total of 16 courses (48 credit hours). A maximum of 10 courses (30 credit hours) may be waived if equivalent courses have been completed as part of a bachelor’s degree, and a minimum of 24 hours of study must be taken at VCU.

For additional information, please visit our website at www.business.vcu.edu/graduate.

**Curriculum**

Course work in the certificate program is divided into two categories. Students must complete a core of accounting classes as well as general business courses. The course information is provided below.
The Department of Economics provides instruction for degree programs at the baccalaureate, master's and doctoral level. The faculty works to develop in students the ability to use economic reasoning to understand and analyze business and economic phenomena and policies — the skills needed for careers in a rapidly changing world. To enhance the educational process and to broaden the frontiers of knowledge, faculty members conduct basic and applied research and provide academic and professional service to the university and professional communities.

Administration
Edward L. Millner
Professor and Department Chair
www.bus.vcu.edu/economics

Economics courses
Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to economics (ECON) courses.

**Economics, Bachelor of Science (B.S.) [School of Business]**

Economics is the study of human choice, the study of how scarce resources are allocated among competing uses to satisfy human wants. Since many choices analyzed are made by or affect business decision makers, economics is a unique blend of liberal arts and business. Therefore, the Department of Economics offers an undergraduate major in both the College of Humanities and Sciences and the School of Business. The major in the College of Humanities and Sciences is designed for students who desire the flexibility and breadth that is associated with a liberal arts degree. Students who want to combine training in economics with exposure to the business disciplines should consider the major in the School of Business.

Undergraduate work in economics is excellent preparation for careers in business, government and teaching, and for graduate work in economics and professional schools such as law, public administration and medicine. Specialization in economics prepares people for careers that emphasize analytical thinking, a broad understanding of the economy and business organizations, and the proper choice of policies by governments and business enterprises. Because of their analytical, quantitative and decision-making skills, students who major in economics are sought for a wide array of positions in management and sales. The specific skills they acquire also provide employment opportunities in large organizations with departments that forecast business conditions and analyze economic data of special interest to the organizations.

The major requirements of the program are outlined below. For details on the entire program, see the General requirements for business degrees section of the bulletin.

**Major requirements**

<table>
<thead>
<tr>
<th>Required courses</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACCT 303 Intermediate Accounting I</td>
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<td>ACCT 304 Intermediate Accounting II</td>
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<td>ACCT 306 Cost Accounting</td>
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<td>ACCT 405 Tax Accounting Principles</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 406 Auditing</td>
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</table>

**Electives**

Select five 300- or 400-level ECON courses.

**Total**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
</tr>
</tbody>
</table>

The Department of Finance, Insurance and Real Estate delivers knowledge to students in all programs offered by the School of Business and contributes to the expansion of knowledge by engaging in scholarly activity. The department provides core courses as well as majors, minors and concentrations. In addition, the department develops and delivers courses in continuing professional education for practitioners seeking to upgrade their skills and/or attempting to achieve professional certification.

**Areas of study**

- Finance (refer to the B.S. in Business concentrations for more information)
- Real estate (refer to the B.S. in Real Estate and the post-baccalaureate certificate for more information)
- Financial technology (refer to the B.S. in Financial Technology for more information)

Administration
Nanda K. Rangan
Professor and Department Chair
www.bus.vcu.edu/finance

**Finance, insurance and real estate courses**

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to finance, insurance and real estate (FIRE) courses.
Financial Technology, Bachelor of Science (B.S.)

The Bachelor of Science in Financial Technology offers tracks in actuarial science and financial engineering. The program provides quantitatively oriented students the opportunity to apply mathematical, statistical and programming tools to the financial, risk management and actuarial disciplines. Designed to meet the growing need for quantitative modeling and analysis in finance, risk management and actuarial science, the program is technical and interdisciplinary in nature. The curriculum emphasizes courses in finance, statistics and mathematics, with supporting courses in related areas.

The actuarial science track provides excellent preparation for the basic professional examinations and continued study in actuarial science. Students who complete this track may also find employment in areas such as quantitative applications in corporate and public financial policy, actuarial modeling and forecasting, reserves computation and rate making, and computer and information systems in the financial services and risk management industries.

The financial engineering track offers opportunities in areas such as derivative instruments, securities, hedging, financial risk assessment/management, quantitative trading and arbitrage, and asset/liability management. Students who complete the financial engineering track may choose to continue their education by enrolling in master’s programs in financial engineering and mathematical finance, or by entering directly into doctoral-level study in finance and related areas.

Students in the financial technology program must attain a minimum grade of C in all technically oriented and upper-level courses. A student receiving a grade below C may repeat the course one time to raise the grade to the required level. In addition, a minimum GPA of 2.5 or better must be maintained. Students who fall below a GPA of 2.5 will be placed on program probation and will be given one semester to return to a GPA of 2.5 or higher. Students who do not return to the required GPA will be advised out of the program. A student must have a GPA of 2.5 or higher to graduate from the program.

Interested students should contact the chair of the Department of Finance, Insurance and Real Estate, 301 W. Franklin St., Richmond, VA 23284-4000; call (804) 828-1620; or send an email to deptfire@vcu.edu.

Degree requirements

All students in the financial technology program will complete the following courses during the first two years of study.

**First year, fall semester**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECON 210 Principles of Economics</td>
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<tr>
<td>MATH 200 Calculus with Analytic Geometry*</td>
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<tr>
<td>UNIV 111 Focused Inquiry I</td>
<td>4</td>
</tr>
<tr>
<td>One natural/physical sciences course (from Tier II of the university core)</td>
<td>3</td>
</tr>
<tr>
<td>One social/behavioral sciences course (from Tier II of the university core)</td>
<td>3</td>
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</table>

* MATH 151 or satisfactory score on placement test is prerequisite for MATH 200.

**First year, spring semester**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECON 211 Principles of Economics</td>
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<tr>
<td>MATH 201 Calculus with Analytic Geometry</td>
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</tr>
<tr>
<td>UNIV 112 Focused Inquiry II</td>
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<tr>
<td>One humanities/fine arts course (from Tier II of the university core)</td>
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<td>One course from the list of approved general education electives below</td>
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**Second year, fall semester**

<table>
<thead>
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<th>Course Name</th>
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<tr>
<td>INFO 350 Intermediate Programming</td>
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<tr>
<td>MATH 307 Multivariate Calculus</td>
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<tr>
<td>STAT 212 Concepts of Statistics or MGMT 301 Business Statistics</td>
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</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric</td>
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**Second year, spring semester**

<table>
<thead>
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<th>Course Name</th>
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<tbody>
<tr>
<td>UNIV 112 Focused Inquiry I</td>
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<tr>
<td>MATH 310 Linear Algebra</td>
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**Actuarial science track**

**Third year, fall semester**

<table>
<thead>
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<th>Course Name</th>
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<tbody>
<tr>
<td>ACCT 303 Intermediate Accounting I</td>
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</tr>
<tr>
<td>FIRE 311 Financial Management</td>
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</tr>
<tr>
<td>INFO 450 Advanced Programming</td>
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<tr>
<td>MATH/STAT 309 Introduction to Probability Theory</td>
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</tr>
<tr>
<td>MGMT 325 Organizational Communication</td>
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**Third year, spring semester**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 304 Intermediate Accounting II</td>
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<tr>
<td>FIRE 312 Intermediate Financial Management</td>
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</tr>
<tr>
<td>FIRE 314 Investments</td>
<td>3</td>
</tr>
<tr>
<td>INFO 364 Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>STAT 321 Introduction to Statistical Computing</td>
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**Fourth year, fall semester**

<table>
<thead>
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<th>Course Name</th>
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<tbody>
<tr>
<td>FIRE 428 Employee Benefit Planning</td>
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<tr>
<td>FIRE 432 Insurance Law</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 455 Options, Futures and Swaps</td>
<td>3</td>
</tr>
<tr>
<td>MATH/OPER 327 Mathematical Modeling</td>
<td>3</td>
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<tr>
<td>STAT 513 Mathematical Statistics I</td>
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**Fourth year, spring semester**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FIRE 414 Security Analysis and Portfolio Management</td>
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<tr>
<td>FIRE 465 Managing Financial Risk</td>
<td>3</td>
</tr>
<tr>
<td>STAT 514 Mathematical Statistics II</td>
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<td>AS approved elective (choose two)</td>
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<tr>
<td>FIRE 424 Property and Liability Insurance</td>
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<tr>
<td>FIRE 426 Life and Health Insurance</td>
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</tr>
<tr>
<td>FIRE 430 Issues in Risk Management</td>
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<tr>
<td>FIRE 493 Internship in Finance, Insurance and Real Estate</td>
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</table>

**Financial engineering track**

**Third year, fall semester**

<table>
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<th>Course Name</th>
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<tbody>
<tr>
<td>FIRE 311 Financial Management</td>
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</tr>
<tr>
<td>INFO 450 Advanced Programming</td>
<td>3</td>
</tr>
<tr>
<td>MATH/STAT 309 Introduction to Probability Theory</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 325 Legal Environment of Business</td>
<td>3</td>
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<tr>
<td>MGMT 325 Organizational Communication</td>
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**Third year, spring semester**

<table>
<thead>
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<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECON 501 Econometrics</td>
<td>3</td>
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<tr>
<td>FIRE 312 Intermediate Financial Management</td>
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</tr>
<tr>
<td>FIRE 314 Investments</td>
<td>3</td>
</tr>
<tr>
<td>INFO 364 Database Systems</td>
<td>3</td>
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<tr>
<td>STAT 321 Introduction to Statistical Computing</td>
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</table>

**Fourth year, fall semester**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE 314 Investments</td>
<td>3</td>
</tr>
<tr>
<td>INFO 364 Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>STAT 321 Introduction to Statistical Computing</td>
<td>3</td>
</tr>
</tbody>
</table>
The major in real estate prepares students for the graduate-level study of real estate, economics and finance, as well as careers in land development, brokerage, valuation and investment counseling, site analysis and selection, real property management, mortgage lending, and bank trust and corporate real estate departments, in addition to other real-estate-related careers in the public and private sectors.

The major requirements of the program are outlined below. For details on the entire program, see the General requirements for undergraduate business degrees section of this bulletin.

Students must receive a minimum grade of C in each of the major requirements.

**Real Estate, Bachelor of Science (B.S.)**

<table>
<thead>
<tr>
<th>Required courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE 316 Principles of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 326 Real Estate Law</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 425 Real Estate Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 429 Real Estate and Capital Markets</td>
<td>3</td>
</tr>
<tr>
<td>ECON 307 Money and Banking</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 312 Intermediate Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 314 Investments</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 317 Real Property Management</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 333 Risk and Insurance</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 424 Property and Liability Insurance</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 437 Funds Management in Financial Institutions</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 455 Options, Futures and Swaps</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 465 Managing Financial Risk</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 492 Independent Study in Finance, Insurance and Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 302 Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 491 Topics in Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Approved electives**
Choose any four of the following courses: 12 credits

The Post-baccalaureate Undergraduate Certificate in Real Estate and Urban Land Development is designed for persons who already have earned a baccalaureate degree in fields other than real estate, yet do not wish to work toward a graduate degree in this field. The certificate program is popular with professionals who wish to study real estate, economics and finance to help them advance in their careers as well as for those who wish to become real estate professionals in land development, brokerage, valuation and investment counseling, site analysis and selection, real property management, mortgage lending, and bank trust and corporate real estate-related careers in the public and private sectors.

A minimum of 30 semester credit hours must be earned to satisfy this certificate requirement, with a minimum of 24 semester hours of study required at VCU.

Students must receive a minimum grade of C in each of the major required courses.

For additional information, please visit our website at www.business.vcu.edu/graduate.

**Credits**

27

**Real Estate and Urban Land Development, Certificate in (Post-baccalaureate undergraduate certificate)**

The Department of Information Systems provides an innovative, high quality curriculum that is recognized nationally and internationally and maintains the ability to rapidly respond to the dynamic, changing needs of the academic discipline, industry and community.
The department offers degree programs at both the undergraduate and graduate level, as well as continuing education programs that support alumni and the community. Additionally, courses in information systems are offered to meet the needs of students in other curricula offered by the university as well as those who are seeking to enhance their knowledge of information systems.

Our faculty offers expertise in information technology and has wide-ranging research and teaching interests. As part of the department, the Information Systems Research Institute provides opportunities for sponsored research, innovative teaching initiatives and faculty development.

## Administration

**Richard T. Redmond**  
Associate Professor and Department Chair  
[www.isy.vcu.edu](http://www.isy.vcu.edu)

## Information systems courses

Descriptions for all courses offered by the university may be accessed through the online courses database at [www.pubapps.vcu.edu/vcucourses](http://www.pubapps.vcu.edu/vcucourses). You may search by unit, subject or keyword, as well as by degree level.

The Department of Information Systems offers courses in the following areas:

- Use this link to see information systems (INFO) courses.
- Use this link to see graduate-level information technology management (ISTM) courses.

### Information Systems, Bachelor of Science (B.S.)

The major in information systems is designed to prepare students for professional careers in the discipline of information systems. Through required and elective courses students will be prepared for positions as application developers, business analysts and network administrators.

The major requires students to take a major core of six required courses and then choose three upper-level courses from the list of approved electives.

Exceptions to prerequisite courses require recommendation of the adviser and permission of the department chair.

The major requirements of the program are outlined below. For details on the entire program, see the General requirements for business degrees section of this bulletin.

#### Major core (18 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFO 300 Information Technology Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>INFO 350 Intermediate Programming</td>
<td>3</td>
</tr>
<tr>
<td>INFO 361 Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>INFO 364 Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>INFO 370 Fundamentals of Data Communications</td>
<td>3</td>
</tr>
<tr>
<td>INFO 461 Information Systems Planning and Project Management</td>
<td>3</td>
</tr>
<tr>
<td>INFO 465 Projects in Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Upper-level electives (6 credits)

#### Total (24 credits)

#### Approved electives (three credits each)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFO 450 Advanced Programming</td>
<td></td>
</tr>
<tr>
<td>INFO 451 Java Support for E-business</td>
<td></td>
</tr>
<tr>
<td>INFO 463 Business Process Engineering</td>
<td></td>
</tr>
<tr>
<td>INFO 468 Information Engineering</td>
<td></td>
</tr>
<tr>
<td>INFO 472 Infrastructure Services</td>
<td></td>
</tr>
<tr>
<td>INFO 474 Advanced Networking and Security</td>
<td></td>
</tr>
<tr>
<td>INFO 491 Topics in Information Systems</td>
<td></td>
</tr>
<tr>
<td>INFO 492 Independent Study in Information Systems</td>
<td></td>
</tr>
<tr>
<td>INFO 493 Internship in Information Systems</td>
<td></td>
</tr>
</tbody>
</table>

Note: Students who wish to concentrate their electives within a track to gain enhanced proficiency may do so. The recommended tracks are:

- Application development: INFO 450 and 451
- Business analysis: INFO 463 and 468
- Information and communications technology: INFO 472 and 474

Note: INFO 202 Introduction to E-business Technologies is a prerequisite for INFO 350. INFO 202 cannot be used as an elective within the information systems major, but may be used in the Business Foundation Program under the category “Business and/or non-business electives.”

### Information Systems, Certificate in (Post-baccalaureate undergraduate certificate)

The Post-baccalaureate Certificate in Information Systems is designed for students who hold bachelor’s degrees in fields other than information systems and who wish to continue their education in information systems but do not aspire to a master’s degree. Candidates for the certificate are required to complete a total of 30 hours beyond the bachelor’s degree, including the courses listed below or their equivalents, with a minimum of 24 credit hours of study in information systems to be taken at VCU.

The certificate is designed to provide more than a basic knowledge of information systems. Specifically, persons completing the program are expected to achieve competency in understanding information systems terminology, concepts and principles; computer program design, writing and testing; systems analysis/design through proper application and knowledge of current hardware and software; and planning and carrying out system development and the management of information systems. Students acquiring these skills are well-received in the business community and in governmental organizations.

For additional information, please visit our website at [www.business.vcu.edu/graduate](http://www.business.vcu.edu/graduate).

#### Required courses

- Application development track
- Business analysis track
- Network management track

#### Major core (24 credits)

<table>
<thead>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>INFO 350 Intermediate Programming</td>
<td>3</td>
</tr>
<tr>
<td>INFO 360 Business Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>INFO 361 Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>INFO 364 Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>INFO 370 Fundamentals of Data Communications</td>
<td>3</td>
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<td>INFO 461 Information Systems Planning and Project Management</td>
<td>3</td>
</tr>
<tr>
<td>INFO 465 Projects in Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Total (30 credits)

#### Upper-level electives (6 credits)

#### Approved electives (three credits each)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
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Exceptions to prerequisite courses require recommendation of the adviser and permission of the department chair.

Note: INFO 202 Introduction to E-business Technologies is a prerequisite for INFO 350. INFO 202 cannot be used as an elective within the information systems major, but may be used in the “Business Foundation Program under the category Business and/or non-business electives.”

### Department of Management

The Department of Management offers a variety of baccalaureate-, masters- and doctoral-level degrees and certificate programs. Courses offered include organizational behavior, human resource management, entrepreneurship, international management, strategic management, operations management, organizational communication, and decision sciences.

#### Areas of study
- Business administration and management (refer to the B.S. in Business concentrations for more information)
- Human resource management (refer to the B.S. in Business concentrations, the post-baccalaureate certificate and the minor for more information)
- International management (refer to the undergraduate certificate program)

### Administration

Jose H. Dula  
Associate Professor and Interim Chair  
[www.bus.vcu.edu/management](http://www.bus.vcu.edu/management)

### Management courses

Descriptions for all courses offered by the university may be accessed through the online courses database at [www.pubapps.vcu.edu/vcucourses](http://www.pubapps.vcu.edu/vcucourses). You may search by unit, subject or keyword, as well as by degree level.

Follow this link to management (MGMT) courses.

### Certificate requirements

#### Human Resource Management, Certificate in (Post-baccalaureate undergraduate certificate)

The Post-baccalaureate Undergraduate Certificate in Human Resource Management is designed to increase the knowledge and skills of human resource practitioners, to prepare individuals who are seeking employment in the field and to educate persons who desire more knowledge about human resource management.

The program is designed to provide students with an understanding of HRM technology, concepts and principles to design and implement HRM policies that support an organization’s strategic plan and to develop HRM practices that enhance an organization’s ability to attract, motivate, develop and retain effective employees. Persons completing the program should have enhanced opportunities for employment in the HRM field.

Students must earn a minimum of 30 semester credit hours to satisfy the certificate requirements, with a minimum of 24 semester credit hours earned at VCU.

For additional information, please visit our website at [www.business.vcu.edu/graduate](http://www.business.vcu.edu/graduate).

#### Certificate requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foundation courses</strong> – Students should take these courses first.</td>
<td></td>
</tr>
<tr>
<td>MGMT 319 Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 331 Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Required courses</strong></td>
<td></td>
</tr>
<tr>
<td>MGMT 431 Strategic Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 433 Compensation Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT/INTL 446 International Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Approved electives (choose five)</strong></td>
<td>15</td>
</tr>
<tr>
<td>FIRE 428 Employee Benefit Planning</td>
<td></td>
</tr>
<tr>
<td>FIRE/MGMT 444 Occupational Safety, Health and Security</td>
<td></td>
</tr>
<tr>
<td>MGMT 389 Managerial Skills Development</td>
<td></td>
</tr>
<tr>
<td>MGMT 403 Human Resource Development</td>
<td></td>
</tr>
<tr>
<td>MGMT 420 Labor and Employment Relations</td>
<td></td>
</tr>
<tr>
<td>MGMT 427 Employment Law</td>
<td></td>
</tr>
<tr>
<td>MGMT 447 Human Resource Information Systems</td>
<td></td>
</tr>
<tr>
<td>MGMT 493 Internship in Management*</td>
<td></td>
</tr>
<tr>
<td>PSYC 310 Industrial Psychology</td>
<td></td>
</tr>
</tbody>
</table>

Total: 30

* Any prerequisites must also be satisfied.

** Requires departmental approval.

### International Management Studies, Certificate in (Undergraduate certificate)

The certificate program in international management studies is an interdisciplinary program offered by the Department of Management in the School of Business and the School of World Studies in the College of Humanities and Sciences. The certificate program combines international management, foreign languages and European studies into a unique program intended to equip students for careers in international business. Students concentrating in liberal arts or business programs, as well as other majors, are encouraged to apply.

Certification through this program requires 33 to 36 hours of approved credits from the list of courses given below. Students may enroll in this program and take courses while enrolled in another undergraduate program at the university, but must choose the same country track for European studies and foreign language courses.

For more information, contact Dr. Charles M. Byles of the Department of Management at (804) 828-7125 or [cmbyles@vcu.edu](mailto:cmbyles@vcu.edu), or Dr. Patricia Cummins of the School of World Studies at (804) 827-0958 or [pcmummins@vcu.edu](mailto:pcmummins@vcu.edu), or visit the program’s website: [www.cim.bus.vcu.edu](http://www.cim.bus.vcu.edu).

#### Course requirements

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>European studies</strong></td>
<td>9</td>
</tr>
<tr>
<td>Select three courses from the following list. At least one course must be specific to one of the following country tracks: France, Germany or Spain.</td>
<td></td>
</tr>
<tr>
<td>EUCU 307 Aspects of German Culture</td>
<td></td>
</tr>
<tr>
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<td>PSYC 310 Industrial Psychology</td>
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</table>

### Humanities courses

- MGMT 403 Human Resource Development
- MGMT 420 Labor and Employment Relations
- MGMT 427 Employment Law
- MGMT 447 Human Resource Information Systems
- MGMT 493 Internship in Management*
- PSYC 310 Industrial Psychology
- ** Requires departmental approval.

### International Management Studies, Certificate in (Undergraduate certificate)

- ** Requires departmental approval.

### Areas of study

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<td>PSYC 310 Industrial Psychology</td>
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</tr>
</tbody>
</table>

Total: 30

* Any prerequisites must also be satisfied.

### International Management Studies, Certificate in (Undergraduate certificate)

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<td></td>
</tr>
<tr>
<td>PSYC 310 Industrial Psychology</td>
<td></td>
</tr>
</tbody>
</table>
FREN 421 French Contemporary Culture
GEOG 334 Regional Geography of _________
GRMN 421 The Postwar German Scene
HIST 102 Survey of European History
HIST 313 Post-war Europe, 1945 to the Present
HIST 316 History of France
HIST 318 History of Germany
HIST 323 History of Spain and Portugal
HIST 330 European Social History
POLI/INTL 352 European Governments and Politics
SPAN 420 Civilization of Spain II

Foreign languages
Select one of the following language tracks:

French
FREN 300 Advanced Grammar and Writing
FREN 321 French Civilization and Culture II
FREN 440 Commercial French

German
GRMN 301 German and Writing
GRMN 314 Commercial German
GRMN 317 Advanced German and Writing
GRMN 321 German Civilization II

Spanish
SPAN 300 Advanced Grammar and Writing
SPAN 320 Civilization of Spain I
SPAN 414 Commercial Spanish

International management

MGMT 319 Organizational Behavior
MGMT 329/INTL 327 Introduction to Intercultural Communication
MGMT/INTL 418 International Management

Experiential learning

The following courses are ways to apply program content to international management settings. Choose any one.

INTL 493 International Studies Internship
MGMT/INTL 491 Topics in Management: The European Union (Study Abroad)
Approved service-learning course (SPAN/LING 402 Language Issues in the Spanish-speaking World, FREN 300 Advanced Grammar and Writing, RELS 340/INTL 341 Global Ethics and the World’s Religions or other approved courses).

Language/cultural immersion experience

0-3
Students must complete an approved language/cultural immersion experience by which they demonstrate the successful application of foreign language, cross-cultural and management skills. This demonstration can be achieved through an approved study abroad program, such as MGMT/INTL 491 Topics in Management: The European Union, an overseas internship, a service-learning course or previous life experience.

Core course in international management

3
Students must complete the following integrative course, which should be taken toward the end of the program.

MGMT/INTL 419 Doing Business in Europe

Total
33-36

The Department of Marketing provides students with a comprehensive introduction to the many topics and concepts that make up today's marketing professions. Additionally, students have the opportunity to participate in high quality learning experiences that broaden traditional ideas of the classroom in projects, exercises and internship experiences that involve a variety of business organizations as well as state and local government agencies.

Administration
Michael W. Little
Professor and Interim Chair
www.bus.vcu.edu/marketing

Marketing courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to marketing (MKTG) courses.

Marketing, Bachelor of Science (B.S.)

The major in marketing gives students a broad working knowledge of contemporary marketing philosophy and practice. Judicious selection of courses will also allow students to tailor their program of study to their individual backgrounds, interests, and career aspirations. The courses in the major provide a mix of educational approaches, including lecture and discussion, case problems, and in-field experience. Graduates of this program will find career opportunities in marketing management, advertising, sales, marketing research, public relations, retailing, and other areas of business.

The major requirements of the program are outlined below. For details on the entire program, see the General requirements for business degrees section of this bulletin.

Major requirements

<table>
<thead>
<tr>
<th>Credits</th>
<th>Complete 12 credits from the following courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>MKTG 302 Marketing Problems (3)</td>
</tr>
<tr>
<td></td>
<td>MKTG 310 Information for Marketing Decisions (3)</td>
</tr>
<tr>
<td></td>
<td>MKTG 315 Buyer Behavior (3)</td>
</tr>
<tr>
<td></td>
<td>MKTG 320/INTL 320 International Marketing (3)</td>
</tr>
</tbody>
</table>

Complete 15 credits from the following elective courses:

<table>
<thead>
<tr>
<th>Credits</th>
<th>INNO 460 Product Innovation: da Vinci Project (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MKTG 330 Integrated Marketing Communications (3)</td>
</tr>
<tr>
<td></td>
<td>MKTG 340 Retail Management (3)</td>
</tr>
<tr>
<td></td>
<td>MKTG 435 Personal Selling and Sales Management (3)</td>
</tr>
<tr>
<td></td>
<td>MKTG 442 Services Marketing (3)</td>
</tr>
<tr>
<td></td>
<td>MKTG 445 Nonprofit Marketing (3)</td>
</tr>
<tr>
<td></td>
<td>MKTG/INTL 448 Internet Marketing (3)</td>
</tr>
<tr>
<td></td>
<td>MKTG 450 Product Development and Management (3)</td>
</tr>
<tr>
<td></td>
<td>MKTG 470 Field Project in Marketing (3)</td>
</tr>
<tr>
<td></td>
<td>MKTG 475 Honors Seminar in Marketing (3)</td>
</tr>
<tr>
<td></td>
<td>MKTG 491 Topics in Marketing (variable, with no more than 6 credits total)</td>
</tr>
<tr>
<td></td>
<td>MKTG 492 Independent Study in Marketing (1-3)</td>
</tr>
</tbody>
</table>

Total credits for the major: 27

Note: Students may use up to 6 credits from an approved list of non-MKTG courses in order to fulfill the 15 credits of marketing electives. Students must complete prerequisites for these courses as specified in the VCU Bulletin. Students also may elect to pursue one of the optional tracks within the marketing major. The current list of approved non-MKTG courses, and the descriptions of the optional tracks, are available at: www.bus.vcu.edu/marketing/BsinMKTG.htm

Recommended advanced program sequence for marketing majors

Freshman/sophomore years Business Foundation 63

Business advanced core and major

Junior year, fall semester

Undergraduate Bulletin 2012-13
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFO 360</td>
<td>Business Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 301</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 319</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 325</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 301</td>
<td>Marketing Principles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Junior year, spring semester</strong></td>
<td></td>
</tr>
<tr>
<td>FIRE 311</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 320</td>
<td>Production/Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 323</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 302</td>
<td>Marketing Problems</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 310</td>
<td>Information for Marketing Decisions</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Senior year, full semester</strong></td>
<td></td>
</tr>
<tr>
<td>ECON 303</td>
<td>Managerial Economics</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 315</td>
<td>Buyer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MKTG/INTL 320</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Senior year, spring semester</strong></td>
<td></td>
</tr>
<tr>
<td>MGMT 434</td>
<td>Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG electives</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits (Business Foundation, advanced core and major requirements)</strong></td>
<td>120</td>
</tr>
</tbody>
</table>
Undergraduate Bulletin

School of Dentistry
The School of Dentistry was created in 1893 when the University College of Medicine opened with a dental department as one of its original divisions. The Medical College of Virginia inaugurated a dental education program in 1897, and in 1913 the two schools were merged to form the MCV School of Dentistry.

In 1968, by an act of the Virginia General Assembly, MCV was merged with Richmond Professional Institute to form Virginia Commonwealth University. The School of Dentistry is located on VCU’s MCV Campus.

The facilities of the School of Dentistry are housed in the Wood Memorial, Lyons and Perkinson buildings and contain clinical facilities, research facilities, classrooms, student laboratories, departmental offices and a computer-learning laboratory.

The school provides opportunities for selected, qualified individuals to study dentistry under the most favorable conditions and in accordance with the standards established by the Commission on Dental Accreditation of the American Dental Association.

The degree of Doctor of Dental Surgery (D.D.S.) is awarded to graduates of the school’s professional program and the Bachelor of Science degree to graduates of the Division of Dental Hygiene.

Graduates of the advanced dental education programs in endodontics, orthodontics, pediatric dentistry and periodontics are awarded the Master of Science in Dentistry degree.

### Administration

520 North 12th Street  
P.O. Box 980566  
Richmond, Virginia 23298-0566  
(804) 828-9184  
Fax: (804) 828-6072  
www.dentistry.vcu.edu

**David C. Sarrett**  
Dean

**Carolyn Booker**  
Associate Dean, Student Services

**James C. Burns**  
Associate Dean, Clinical Dental Education

**B. Ellen Byrne**  
Senior Associate Dean

**Laurie C. Carter**  
Director of Advanced Dental Education Programs

**Michael Healy**  
Assistant Dean, Admissions

**Rebecca Pousson**  
Executive Associate Dean

**Harvey A. Schenken**  
Assistant Dean, Research

### Accreditation

- Dental Hygiene (bachelor’s degree)  
  Commission on Dental Accreditation
- Dentistry (D.D.S.)  
  Commission on Dental Accreditation
- Advanced Dental Education Programs (including Endodontics, Oral and Maxillofacial Surgery, Orthodontics, Pediatric Dentistry, Periodontics, and Advanced Education in General Dentistry)  
  Commission on Dental Accreditation

### Mission

The VCU School of Dentistry is a public, urban, research dental school, supported by Virginia to serve the people of the commonwealth and the nation. The school’s mission is to provide educational programs that prepare graduates qualified to provide dental care services; generate new knowledge through research and other scholarly activity; and provide quality oral health care to the public and service to the community.

### Dental Hygiene Program

<table>
<thead>
<tr>
<th>VCU School of Dentistry</th>
<th>W. Baxter Perkinson, Jr. Building, Suite 3100</th>
<th>1101 East Leigh Street</th>
<th>P.O. Box 980566</th>
<th>Richmond, Virginia 23298-0566</th>
<th>Phone: (804) 828-9096</th>
<th>Fax: (804) 827-0969</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Michelle McGregor, RDH, B.S., M.Ed.</strong></td>
<td>Director, Dental Hygiene Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Coral Diaz**  
Chair, Dental Hygiene Admissions Committee

The Dental Hygiene Program, established in 1969, offers courses leading to a Bachelor of Science in Dental Hygiene. The program requires two years of liberal arts study, with a minimum of 60 semester hours, followed by two years of study focusing on basic and dental sciences, dental hygiene science and theory, community health and pre-clinic and clinical experiences. The Dental Hygiene Program is accredited by the Commission on Dental Accreditation of the American Dental Association. Upon successful completion of the program, graduates are eligible for national, regional and state board licensing examinations.

### Curriculum notes

- As part of students’ course of study and community education, travel to off-campus sites is expected. Students will be required to provide their own transportation to agencies used for clinical and community health rotation experiences.

- Licensing/certification: It is important for every student to understand that, while certain curricula are designed for the purpose of achieving registration or certification by an outside agency, completion of such an academic program in no way assures the student of successful registration or certification. No employee, agent or representative of this university is authorized or empowered to provide such assurances either directly or by implication.

- Individuals who have a felony or misdemeanor conviction may not be eligible for licensure in Virginia. The Virginia Board of Dentistry makes this decision. For questions regarding this issue, call the Virginia Board of Dentistry at (804) 662-9906.

### Policy on blood-borne and infectious diseases

By the nature of the profession, oral health care providers are routinely exposed to blood and body fluids during the treatment of patients in a clinical environment. In accordance with Section 32.1-45.1 of the Code of Virginia, the School of Dentistry requires that if a health care provider is exposed to body fluids in a manner that may transmit blood-borne or infectious disease, both the health care provider and the patient will be tested for disease.

### Mission, philosophy and program goals

#### Mission

As an integral part of the VCU School of Dentistry as well as the greater university:

- The mission of the Dental Hygiene Program is to prepare future practitioners who are competent in patient care delivered in a culturally sensitive manner; who will provide service to the local, national and global community and the profession; and who are lifelong learners who are responsive to a changing profession.

#### Philosophy

The Dental Hygiene Program is dedicated to providing an education to a diverse population of learners in a patient-centered, student-friendly atmosphere that fosters active and self-directed learning, critical thinking and self-assessment.

Dental hygienists are recognized in their roles as clinician, educator, advocate, manager and researcher in the prevention of oral diseases and health promotion. Our purpose is to empower students in attaining their full potential as informed,
productive oral health professionals with a lifelong commitment to learning and service.

Program goals
The following program goals reflect the mission of the School of Dentistry and the university.

Education
Prepare dental hygiene graduates who possess the knowledge, values, ethics and skills to provide quality dental hygiene care through demonstrated competence as defined by the Dental Hygiene Program Competencies for the Entry-Level Dental Hygienist.

Provide students with an interdisciplinary curriculum that integrates biomedical, clinical and behavioral sciences.

Patient care
Prepare dental hygiene graduates who are competent to provide patient-centered, comprehensive, evidence-based dental hygiene care in an ethical and professional manner.

Provide a clinical education based on wellness and designed to create satisfied patients who will achieve and maintain optimal oral health through a combined educational, preventive and therapeutic approach.

Service
Prepare dental hygiene graduates to respond to the evolving oral health care needs of a culturally diverse society by demonstrating a commitment to the community.

Provide students with opportunities for service-learning activities in the community that promote the missions of the school, university and profession.

Professionalism
Prepare dental hygiene graduates to assume active roles in professional organizations.

Provide students with the skills to advance the foundation and practice of dental hygiene through a commitment to scientific inquiry and lifelong learning.

Admission requirements
Two years of liberal arts study with a minimum of 60 semester hours of transferable quality academic course credits are required. For more information on the following prerequisites, please visit www.dentistry.vcu.edu/prospective/dh/prerequisites.aspx.

<table>
<thead>
<tr>
<th>Prerequisite courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>6</td>
</tr>
<tr>
<td>General biology with laboratory</td>
<td>3-5</td>
</tr>
<tr>
<td>College chemistry with laboratory</td>
<td>3-5</td>
</tr>
<tr>
<td>Anatomy and physiology with laboratory</td>
<td>5-8</td>
</tr>
<tr>
<td>Microbiology with laboratory</td>
<td>3-5</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Introductory sociology</td>
<td>3</td>
</tr>
<tr>
<td>Introductory psychology</td>
<td>3</td>
</tr>
<tr>
<td>Speech</td>
<td>3</td>
</tr>
<tr>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Visual or performing arts</td>
<td>3</td>
</tr>
</tbody>
</table>

The remainder of the 60 required credits can be chosen from any of the following areas of study: science, math, computer usage, first aid and CPR, and humanities. Science electives are strongly recommended. For a list of prerequisite courses that can be taken in the Virginia Community College System or through Richard Bland College, refer to the VCU Transfer Guide.

Additional prerequisites are as follows:

- **GPA** – A minimum GPA of 2.5 based on a 4.0 scale in the cumulative courses and a minimum GPA of 2.7 in the math/science and designated prerequisite courses are required.

- **English proficiency** – To successfully complete the dental hygiene curriculum, students are required to communicate clearly (in English) with faculty, students, staff and patients. To assure such competence, the Dental Hygiene Program requires any applicant whose native language is not English and who has been educated primarily outside of the United States to submit official Test of English as a Foreign Language or International English Language Testing System scores. Applicants are required to submit an official score with the application packet. The test must have been taken within the past two years. The Dental Hygiene Program does not conditionally admit applicants who have not met the requirement for proof of English proficiency.

You may be exempt from this requirement if:

- You have successfully completed 26 or more transferable semester credits at a two- or four-year postsecondary institution in the United States and have completed the full freshman English (non-ESL) requirement at that school with a grade of C or better or
- You have successfully completed 60 or more transferable semester credits at a two- or four-year postsecondary institution in the United States

No student will be considered for admission until proof of English proficiency is determined.

TOEFL: VCU’s Dental Hygiene Program minimum TOEFL score requirements is 550 (paper), 213 (computer) or 79-80 (internet-based). For more information about TOEFL testing, go to: www.ets.org

IELTS: VCU’s Dental Hygiene Program minimum IELTS score requirement is 6.0.

- **Deadline** – Complete the application and submit the required transcripts, references, personal statement and application on or before Feb. 15. The complete application package must be received by the Office of Undergraduate Admissions on the MCV Campus (VMI Building, 1000 E. Marshall St., Room 322) on or before Feb. 15 (not postmarked Feb. 15). Transcripts must include final grades for the fall semester just prior to the application deadline.

- **Criminal background check** – As an applicant to the Dental Hygiene Program at the VCU School of Dentistry, all accepted candidates, prior to matriculation, will be required to submit to a criminal background check. A final decision about matriculation will be made after a review of the applicant’s CBC.

Any application that does not meet the above stipulations will not be processed. As part of the selection process, a candidate may be asked to participate in a personal interview process.

For additional information on prerequisites or the application or admissions process, please visit the program’s website for prospective students at www.dentistry.vcu.edu/prospective/dh.

Academic Performance Committee guidelines
The faculty of the VCU School of Dentistry has the responsibility for evaluating the student’s academic performance. It is incumbent on the course directors or their designees to specify, at the time a course first convenes, the criteria to be used in student assessment and the standards by which the students will be judged.

Guidelines that govern the actions of the Academic Performance Committee and the academic activities of the students are distributed to all students at the beginning of their studies. The guidelines are available upon request from the Office of Academics in the School of Dentistry.

Financial assistance
A brief description of financial aid based on demonstrated need is contained in the Financial aid section of this bulletin. Scholarships and loans are available from various sources. Information on financial aid is also available upon request from the Office of Financial Affairs, School of Dentistry, Virginia Commonwealth University, P.O. Box 980566, Richmond, VA 23298-0566.

Criminal background checks
As an applicant to the Dental Hygiene Program at Virginia Commonwealth University School of Dentistry, all accepted candidates, prior to matriculation, will
be required to submit to a criminal background check (CBC). A final decision about matriculation will be made after a review of the applicant’s CBC.

The rationale for performing CBCs:

• To foster patient safety and well-being.
• To bolster the continuing trust of the public in the dental hygiene profession.
• To ascertain the ability of accepted applicants and enrolled dental hygiene students to eventually become licensed as dental hygienists.
• To minimize the liability of dental schools and their affiliated clinical facilities.

The CBC will not be a component of the application, interview or selection process but will be a mandatory component of the prematriculation process. The final decision regarding matriculation of an applicant will be based on the self-reported information in the candidate’s application and information in the CBC report. Factors involved in the final decision may include, but are not limited to:

• The nature, circumstances and frequency of any reported offense(s).
• Length of time since the offense(s).
• Available information that addresses efforts at rehabilitation.
• The accuracy of the information provided by the applicant.

The information obtained through a CBC will not become part of a student’s academic file and will remain confidential unless the findings result in an institutional action by the School of Dentistry.

Only candidates offered class positions and alternate-list candidates will be asked to provide a CBC prior to matriculation.

Candidates will be responsible for the cost of the CBC.

Preparatory study for dental hygiene

The University College provides programs in preparation for admission into health sciences programs. For detailed information on pre-dental hygiene, see Preparation for the study of dental hygiene in the UC section of this bulletin.

Dental hygiene courses

Descriptions for all courses offered by the university may be accessed through the online courses database at [www.pubapps.vcu.edu/vcucourses](http://www.pubapps.vcu.edu/vcucourses). You may search by unit, subject or keyword, as well as by degree level.

Follow this link to dental hygiene (DENH) courses.

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### Dental Hygiene, Bachelor of Science (B.S.)

The Bachelor of Science in Dental Hygiene requires two years of liberal arts study, with a minimum of 60 semester hours, followed by two years of study focusing on basic and dental sciences, dental hygiene science and theory, community health and pre-clinical and clinical experiences. Upon successful completion of the program, graduates are eligible for national, regional and state board licensing examinations. Classes enter once each year in the fall semester.

#### Dental hygiene curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Junior year</strong>&lt;br&gt;<strong>fall semester</strong></td>
<td>ANAT 301 Head and Neck Anatomy for Dental Hygienists</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>ANAT 302 Microscopic Anatomy (Dental Hygiene)</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>DENH 301 Dental Hygiene Theory I</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>GENP 311 Oral Anatomy and Occlusion</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>MICR 365 Infection and Immunity (Dental Hygiene)</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>ORPT 311 Dental Radiology</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>PERI 326 Periodontics I</td>
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<td><strong>Total</strong></td>
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<tr>
<td><strong>Junior year</strong>&lt;br&gt;<strong>spring semester</strong></td>
<td>DENH 302 Dental Hygiene Theory II</td>
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<tr>
<td></td>
<td>DENH 312 Preventive Oral Health Education</td>
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<tr>
<td></td>
<td>DENH 327 Clinical Dental Hygiene I (seminar)</td>
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<tr>
<td></td>
<td>DENH 342 Nutrition</td>
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</tr>
<tr>
<td></td>
<td>GENP 302 Dental Materials</td>
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</tr>
<tr>
<td></td>
<td>ORPT 324 Oral Pathology</td>
<td>3.0</td>
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<table>
<thead>
<tr>
<th>Semester</th>
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<tbody>
<tr>
<td><strong>Senior year</strong>&lt;br&gt;<strong>fall semester</strong></td>
<td>PERI 329 Periodontics II</td>
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<td></td>
<td>DENH 401 Dental Hygiene Theory III</td>
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<tr>
<td></td>
<td>DENH 407 Research Methods and Study Designs</td>
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</tr>
<tr>
<td></td>
<td>DENH 411 Introduction to Public Health</td>
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<tr>
<td></td>
<td>DENH 437 Clinical Dental Hygiene II (capstone)</td>
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<tr>
<td></td>
<td>ORSG 431 Management of the Medically Compromised Dental Patient and Medical Emergencies in the Dental Office</td>
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</tr>
<tr>
<td></td>
<td>PHTX 441 Pharmacology (Dental Hygiene)</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>20.5</strong></td>
</tr>
<tr>
<td><strong>Senior year</strong>&lt;br&gt;<strong>spring semester</strong></td>
<td>DENH 402 Dental Hygiene Theory IV</td>
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<tr>
<td></td>
<td>DENH 412 Community Dental Health</td>
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</tr>
<tr>
<td></td>
<td>DENH 422 Current Issues, the Law and Ethics</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>DENH 447 Clinical Dental Hygiene III (capstone)</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>12.0</strong></td>
</tr>
</tbody>
</table>
Undergraduate Bulletin

School of Education
The primary objective of the Virginia Commonwealth University School of Education is to prepare students for careers in education, government, health-related professions, recreation and research. All programs combine comprehensive studies in the liberal arts and sciences with professional preparation and concentration in specialized fields of study. Practical applications and field experiences are an integral part of each academic program. The School of Education is committed to preparing high-quality professionals for service in urban, suburban and rural areas.

**Administration**
1015 West Main Street
P.O. Box 842020
Richmond, Virginia 23284-2020
(804) 828-3382
Fax: (804) 828-1323
www.soe.vcu.edu

Michael D. Davis
Professor and Interim Dean

Henry T. Clark III
Professor and Senior Associate Dean for Academic Affairs

Diane J. Simon
Associate Professor and Associate Dean for Student Affairs

**Accreditation**

**Education (all degrees)**
National Council for Accreditation of Teacher Education (initial licensure and advanced degrees for school personnel), the Virginia Department of Education and the Southern Association of Colleges and Schools.

**Athletic training**
Fully accredited by the CAATE and scheduled for a continuing accreditation site visit in the 2012-13 academic year

Students who successfully complete the M.S.A.T. program will be eligible to register with the Board of Certification Inc. and take the certifying examination. Virginia requires state licensure by the Virginia Board of Medicine to practice as a certified athletic trainer.

**Counselor education**
Accredited by the Council on Accreditation of Counseling and Related Educational Programs

This accreditation applies to both the K-12 school counseling track and the college student development and counseling track.

The school holds membership in the American and Virginia Association of Colleges of Teacher Education and in the Holmes Partnership.

**Values statement**
The VCU School of Education is dedicated to the preparation of professional educators and clinicians, the ideals of academic scholarship, and the worthiness of service. Through our work in these areas, we recognize our responsibilities to students, university colleagues, the community at large, and professional organizations. While all of us share common values, the statements below intentionally allow for a variety of interpretations that may be influenced by our assignments, our experiences, and our philosophical principles within programs and across the School of Education.

The school demonstrates its belief in the value of high quality programs by:

- Attracting high quality students.
- Being responsive to the external standards of accrediting and professional organizations.
- Providing meaningful clinical placements.
- Continually evaluating, assessing and improving programs and services.

The school demonstrates its belief in the value of high quality teaching by:

- Creating an environment that supports student success.
- Demonstrating a variety of effective teaching strategies, including technology integration, universal design for learning and student-centered instruction.

- Fostering curriculum development that ensures familiarity with best practice across all disciplines.

The school demonstrates its belief in the value of diversity by:

- Preparing students to work in culturally and linguistically diverse settings.
- Accommodating students with special learning needs.
- Promoting a diverse student and faculty community.
- Supporting intellectual curiosity.
- Modeling and promoting social justice.

The school demonstrates its belief in the value of high quality scholarship and, in particular, the value of research culture by:

- Conducting relevant, high quality research that is responsive to the metropolitan community and contributes to the disciplines.
- Encouraging collaborative research with colleagues, practitioners and students.
- Supporting the creation, interpretation and dissemination of knowledge.
- Integrating current research into teaching.

The school demonstrates its belief in the value of collaboration and partnerships by:

- Serving as a resource for the development of policy, curriculum, instructional practice and professional standards.
- Providing leadership and professional outreach to organizations, the university and the community at large.
- Maintaining partnerships and shared responsibility for professional preparation.

The school demonstrates its belief in the value of critical reflection by:

- Observing ethical practice and professional honesty.
- Encouraging students to exhibit dispositions consistent with accepted professional practice.
- Fostering a trusting, safe community of scholars.
- Engaging in ongoing professional development.
- Examining professional practices.

**Educator as critically reflective practitioner**
The guiding theme of educator preparation programs in the School of Education is educator as critically reflective practitioner. Courses and experiences provide opportunities for individuals to consider means of building on appropriate knowledge to make instructional, assessment, counseling and leadership decisions.

**Organization**
The chief administrative office for the School of Education is the Office of the Dean, Room 2090 Oliver Hall. Two associate deans assist in the administrative functions of the school. The associate dean for academic affairs is responsible for the school’s Office of Assessment and Technology Services, is responsible for all academic programs offered by the school, assists each department in the administration of the various degree programs and handles administrative areas related to admission, matriculation, graduation and special actions and appeals for graduate students. The associate dean for student affairs is responsible for the school’s student services offices and handles the administrative areas related to admissions, matriculation, student appeals and graduation applications for undergraduate students.

The school is organized for the management of instruction and degree programs into six departments: Counselor Education, Educational Leadership, Foundations of Education, Health and Human Performance, Special Education and Disability Policy, and Teaching and Learning. Four of the departments offer undergraduate course work or programs that lead to an undergraduate degree and/or a Master of Teaching (M.T.) degree:

- Foundations of Education
- Health and Human Performance
- Special Education and Disability Policy
- Teaching and Learning
Two departments offer graduate degrees only:

- Counselor Education
- Educational Leadership

**Facilities**

The School of Education is housed primarily in Oliver Hall, where classroom, laboratory and activity centers, and faculty and administrative offices can be found. Clinical laboratories are located at 3600 W. Broad St.

**Support/resource offices**

The School of Education has developed various resources to provide support services to students, faculty and the academic programs. These resources are the Office of Student Services, the Office of Continuing Education and the Instructional Technology Center, which houses state-of-the-art computer laboratories.

**Student Services Center**

Basic information on the degree programs in the School of Education, as well as forms needed by students as they advance through the programs, are available in the Student Services Center, located on the third floor of Oliver Hall. Students enrolling in the B.S. program can arrange an appointment with undergraduate advising on the first floor of Oliver Hall.

The Office of Student Services in Oliver Hall receives and processes various School of Education application forms and supplies information on the Praxis I examination, Praxis II specialty area tests, Graduate Record Examination and the Miller Analogies Test. For information on student performance on the Praxis examinations, refer to the School of Education Web site at www.soe.vcu.edu/ssc/faq.htm.

This office coordinates clinical placements for students in practica, student teaching, internships and externships. Student teachers and graduate intern teachers are placed in school divisions and other educational facilities in the greater Richmond metropolitan area. Students in non-teacher education programs are placed in practica and clinical experiences through the coordinator of undergraduate advising. Placements are secured in schools, agencies, clinics and hospitals in the greater Richmond metropolitan area. Every effort is made to place students in clinical experiences relevant to their intended career path.

Applications and information on scholarships available to School of Education students can be obtained at the Student Services Center. Information on financial aid administered by the university is found in the appropriate level of “Expenses and Financial Aid” sections of this bulletin.

Licensure and endorsement information, materials and applications for Virginia education personnel are available in the Student Services Center. Licensure and endorsement are based, in part, on the successful completion of an approved program that complies with national standards.

For more information about this center, visit www.soe.vcu.edu/ssc.

**Instructional Technology Center**

The Instructional Technology Center, a multimedia facility, is used by faculty and students in the School of Education. The center houses microcomputers with sophisticated graphics capabilities, educational software and many similar resources for the development of instructional materials. It also provides access to the School of Education’s Local Area Network, VCU Libraries, the Internet and the Web.

**Computer laboratories**

The Instructional Laboratory, housed in the Instructional Technology Center, gives students many opportunities to learn about computer-assisted instruction in the classroom setting. It also lends support to students enrolled in the computer science basic literacy course and other technology courses offered by the school. The laboratory equipment includes Macintosh and IBM-compatible multimedia computers. Laptop computers, laser printers, color laser printers and scanners also are available.

The INFUSIO Distance Learning Technology Laboratory, also housed in the Instructional Technology Center, is a new technology facility designed to provide assistance to faculty, preservice teachers and associates in the School of Education. The lab presently houses a Polycom two-way video conferencing system, interactive Smart and Softboards, and Mimeo digital meeting assistant technology for electronic note taking. There are several high-end multimedia PC stations and a Macintosh work station with a variety of the latest software programs. Computers are equipped with headphones, microphones and digital cans for use in audio and video recording. The INFUSIO Lab includes a number of assistive technologies designed to enhance the concept of universal learning.

A university computer laboratory open to all students is housed in Oliver Hall. The laboratory is equipped with 24 IBM- and Mac-compatible computers that permit students to access the Internet and MS Office software.

**Office of Doctoral Studies**

The Office of Doctoral Studies is responsible for the administration of the Ph.D. in Education and Ph.D. in Rehabilitation and Movement Sciences. Refer to the Ph.D. in Education and Ph.D. in Rehabilitation and Movement Sciences sections of the bulletin for further information on the programs.

**School of Education Associates**

The School of Education Associates is the contact for conducting School of Education off-campus related degree cohort programs, courses for credit and other professional development in-service workshops. Many off-campus partnerships and grant-funded projects also are coordinated and managed. The major emphasis is serving the community of K-through-12 administrators, teachers and staff in Central Virginia. Additionally, distance learning using various forms of technologies is being developed and offered by this office.

**Centers and institutes**

Programs, resources and scholarly and service endeavors of the school are extended by a number of academies, centers, institutes and programs directed by the faculty. These include:

- Behavioral Intervention Program
- Career Connections Techlink
- Center for School-Community Collaboration
- Center for School Improvement
- Center for Sport Leadership
- Central Virginia Leadership Academy
- Metropolitan Educational Research Consortium
- Metropolitan Educational Training Alliance
- Partnership for Persons with Disabilities
- Professional Opportunities for Developing Excellent Teachers: English Second Language
- Rehabilitation Research and Training Center
- Training and Technical Assistance Center
- Virginia Adult Learning Resource Center

**Licensure and reciprocity**

Upon completion of degree requirements in any of VCU’s teacher preparation programs and with the recommendation of the School of Education, students are eligible to receive initial teacher licensure from the Virginia Department of Education. For additional information on licensure, licensure renewal or an add-on endorsement, contact the School of Education’s Student Services Center.

In Virginia, initial licensure requires successful completion of state-mandated tests. Passing scores on these tests are required to progress through different portions of the licensure programs from admission to teacher preparation, admission to student teaching and recommendation for licensure. For a list of testing requirements, please refer to the School of Education website at www.soe.vcu.edu/ssc.

Students should request that their Praxis I and Praxis II specialty area test scores be reported to VCU and the Virginia Department of Education.

Before a recommendation for licensure can be sent to the Teacher Licensure Division of the Virginia Department of Education, these test scores must be on file with the School of Education’s Student Services Center.

**Licensure for education personnel**

Licensure and endorsement are based in part on the successful completion of an approved program developed in response to nationally recognized standards. All licensure and endorsement programs offered by the School of Education are
Graduate programs leading to initial teacher licensure

Individuals often decide to pursue a teaching career after they have completed a baccalaureate degree. VCU serves qualified individuals through approved programs leading to a Master of Teaching, Master of Education (special education) or a Post-baccalaureate Certificate in Teaching. Upon completion of a degree program, graduates are eligible for both Virginia licensure and/or endorsement in the specific degree area.

Students seeking initial licensure in Virginia must have earned a liberal arts degree (or its equivalent) and pursue professional studies focusing on a specific area of preparation or licensure. Those without a liberal arts degree who enter a program should expect to take some additional course work prior to the awarding of a degree.

Those planning to teach at the secondary level must possess a major or its equivalent in the discipline in which they wish to teach and for which VCU offers the approved program teaching specialty.

Individuals who wish to obtain licensure in art education, music education or theater education should consult the School of the Arts section of this bulletin.

The Master of Teaching program integrates undergraduate course work for a bachelor’s degree in a liberal arts or science major with course work and graduate study leading to a Master of Teaching in a program area.

Approved programs and certification reciprocity

All of VCU’s initial teacher preparation programs are approved by the Virginia Department of Education and accredited by the Southern Association of Colleges and Schools and the National Council for Accreditation of Teacher Education. VCU’s School of Education also holds membership in the American and Virginia Associations of Colleges for Teacher Education and the Holmes Partnership.

Based on the National Association of State Directors of Teacher Education and Certification agreement, VCU graduates will be eligible for teacher licensure reciprocity with other states. Students interested in licensure reciprocity should contact the School of Education’s Office of Student Services.

Programs

Bachelor of Science in Health, Physical Education and Exercise Science
Community health education
Exercise science
Pre-medicine
Pre-occupational therapy
Pre-physical therapy
General health and physical and education (teacher preparation)

Minor in foundations of special education

Master of Teaching (extended programs)
Early and elementary education
Health and physical education
Secondary education 6-12
English
History
History and social studies
Mathematics
Sciences
Biology
Chemistry
Earth science
Physics

Master of Education
Adult learning

Counselor education
School counseling PK-12
College student development and counseling
Curriculum and instruction
Educational leadership
Administration and supervision
Leadership studies
Reading
Special education
Early childhood
General education
Severe disabilities
Sport leadership

Master of Science
Health and physical sciences

Master of Science in Athletic Training (M.S.A.T.)

Ph.D. in Education
Educational leadership
Educational psychology
Instructional leadership
Research and evaluation
Special education and disability leadership
Urban services leadership

Ph.D. in Rehabilitation and Movement Science
Exercise physiology track
Neuromusculoskeletal dynamics track

Post-baccalaureate graduate certificates
Autism spectrum disorders
College student development and counseling
Instructional technology
Teaching
Secondary education
English
History/social studies
Mathematics
Sciences
Biology
Chemistry
Earth science
Physics

Post-master’s certificates
Educational leadership
Reading specialist

Extended Teacher Preparation Program

The School of Education, in cooperation with the College of Humanities and Sciences, offers extended teacher preparation programs in early childhood and elementary education (prekindergarten through grade six), health and physical education (grades six through 12) and secondary education (kindergarten through grade 12). The successful completion of these programs results in the simultaneous awarding of both a bachelor’s and a master’s degree.

General degree requirements
Undergraduate major
Change of major and transfer students
Transcript evaluation
Faculty advisement
Professional development schools
Educatior as reflective practitioner
Demographics consideration in teaching
Honors study
Standards of learning
Technology standards
Extended program in early and elementary or secondary education
Extended program in health and physical education

General degree requirements

The successful completion of these programs results in the simultaneous awarding of both a bachelor’s and a master’s degree. Prospective Master of Teaching
students earn their bachelor’s degree in a specific field in which they plan to teach. A student generally begins work on the professional studies component in the third or fourth year of academic study.

A student enrolled in any one of the three extended teacher preparation programs must complete a minimum of 153/154 credits. The student must maintain a cumulative GPA of 2.8 for admission to the teacher preparation program. Completion of at least 90 credits with a minimum GPA of 3.0 in the last 60 semester hours of study is required for that student to be admitted to the graduate studies portion of the extended program.

A Post-baccalaureate Graduate Certificate in Teaching is open primarily to those who have already earned a master’s degree. The candidate must complete at least 30 additional hours beyond the bachelor’s level. Admittance to this program requires a minimum GPA of 3.0 in the last 60 semester hours of study.

Clinical experiences

All initial licensure programs require clinical experiences throughout the program. During the initial stages of a program, these experiences occur as practica in varied placements in K-12 education relevant to the student’s program. Each program also requires a capstone clinical experience in the form of student teaching. For student teaching, those pursuing early and elementary education are placed in two settings, one in early elementary grades (K-2) and one in upper elementary grades (3-5). Those pursuing secondary education receive a single placement in their discipline in a middle school or high school setting.

With the guidance of a mentor, the intern assumes more independence in the field setting. Satisfactory completion of the internship and the preceding training is charted through evaluations made by the university supervisor, colleague-teacher and school administrator.

Undergraduate major

Freshman students who plan to become early and elementary education teachers are required to enroll in the Bachelor of Interdisciplinary Studies liberal studies for early and elementary education major. Transfer students should meet with a B.I.S. adviser prior to course registration. The B.I.S. degree requirements are outlined in the College of Humanities and Sciences section of this bulletin.

Prospective secondary teachers should major in the discipline they wish to teach. The disciplines in which VCU offers licensure programs are as follows: English, history/social studies, mathematics and science (various specialities). Students should consult with their education adviser to ensure that courses taken to meet major requirements also meet state licensure requirements.

Change of major and transfer students

Students wishing to enter the Extended Teacher Preparation Program in early and elementary education or secondary education must transfer initially to the College of Humanities and Sciences. They must declare a major in the college and a specialization in the appropriate professional studies sequence in the School of Education. Students who wish to enter the extended program in health and physical education must choose the general health and physical education concentration in the health, physical education and exercise science major within the School of Education.

For admission to teacher preparation, a minimum GPA of 2.8 is required. A minimum GPA of 3.0 in the last 60 semester hours of study is required for admission to the graduate phase of the Extended Teacher Preparation Program.

Transcript evaluation

The College of Humanities and Sciences evaluates transcripts of students pursuing the extended program in early and elementary education or secondary education; transcripts of students pursuing the extended program in health and physical education are evaluated by the School of Education. Credits are accepted if they conform to specific program guidelines; course equivalents from accredited colleges and universities are accepted if the grade earned is C or better. From the extended program, 60 semester hours of acceptable undergraduate course work are required to be admitted to a teacher preparation program. See specific criteria in the “Admission to the Extended Teacher Preparation Programs” section of this bulletin.

Credits that are accepted from two-year institutions may meet liberal arts and sciences requirements, but will not meet professional requirements for upper-division course work. The VCU Transfer Guide for Virginia Community Colleges lists, in full, credits accepted by VCU that have been earned in the state’s community colleges.

After the initial student transcript evaluation, the assigned adviser reviews the accepted transfer credits with the student, determining what additional course work at VCU will be necessary. An adviser is not required to use all the accepted transfer credits in a student’s program of study. Only those credits approved for transfer can be applied toward the chosen degree.

Faculty advisement

An academic adviser is assigned to a student by the department of that student’s chosen major in the College of Humanities and Sciences. A professional studies adviser is similarly assigned by the Department of Teaching and Learning or the Department of Health and Human Performance according to the student’s proposed teaching endorsement. This adviser-student relationship continues throughout the course of study at VCU. Student and adviser jointly develop the student’s individual program. During the planning process, the student identifies, clarifies and explores his or her personal and professional goals.

Educator as reflective practitioner

The guiding theme of the teacher preparation program is “educator as reflective practitioner.” The underlying foundation of instruction in the teacher preparation program is to challenge the prospective teacher to develop skills in critical reflection and to value thoughtful decision making. Candidates demonstrate critical reflection by: being open to and respectful of all stakeholders; taking other perspectives into account; utilizing critical thinking in framing and solving educational problems; making informed, ethical and professional decisions; and taking ethical and professional action.

Demographics consideration in teaching

The demographics of elementary, middle and high school students are changing. There is an increase in the number of students for whom English is not the first language, of minority students, of students who do not all learn or respond in similar ways and of students who may be identified as possessing a disability.

Future teachers are encouraged to take advantage of opportunities through formal courses and other experiences to gain greater insight and ability in addressing learners from differing cultural backgrounds and considering the needs of learners with different learning styles, participation styles, and special abilities or disabilities.

Honors study

Students who qualify can participate in The Honors College and are eligible to take course sections and special seminars designated “honors.”

Honors sections of the Foundations of Education and Human Development and Learning courses are offered to qualified students, providing them with opportunities for critical investigation in areas of special professional interest.

Standards of learning

Much of the prekindergarten through grade 12 curriculum is based on the commonwealth of Virginia’s current Standards of Learning. Students preparing to be teachers are advised to examine the SOLs for the grade levels and content areas they plan to teach. The School of Education website has a link to the SOLs.

In some instances the content and concepts associated with one or more SOLs may be incorporated in a course in the College of Humanities and Sciences or in the School of Education, but as the SOLs are for a kindergarten through grade 12 curriculum and not a college curriculum, one may need to study several of these on her or his own.

Technology standards

The use of computers, graphing calculators, science probeware and other technologies is integral to successful teaching in today’s schools. Individuals preparing to teach must be competent on each of the eight standards in Virginia’s Technology Standards for Instructional Personnel. These standards may be reached through the School of Education website.

Students are advised to consult with the professional studies adviser regarding the program’s requirements for demonstrating competence. Several of the standards may be documented as met by passing the Computer Literacy Examination offered online through Knowledgenet. Please see the General education requirements for
undergraduate study in the “College of Humanities and Sciences” section of this bulletin.

Extended program in early and elementary or secondary education

In the extended program, a student generally begins work on the professional studies component in the third year of study. Information on specific requirements for all academic majors is available in the Department of Teaching and Learning, in the College of Humanities and Sciences’ associate dean’s office or through the department of the chosen major. Students may visit www.soe.vcu.edu/departments/te for information about programs in the Department of Teaching and Learning. A student in the extended program must maintain a minimum cumulative GPA of 2.8 for admission to teacher preparation and clinical experience and, prior to the fifth year, a minimum GPA of 3.0 for admission to the graduate study portion of the program.

Extended program in teaching health and physical education

Students who plan to become health and physical education teachers should enroll in the Bachelor of Science in Health, Physical Education and Exercise Science major with a concentration in general health and physical education. Transfer students should consult with a program adviser prior to course registration. The requirements for the B.S. are outlined in the program section of this Bulletin. In the extended program students pursue an integrated curriculum leading to simultaneous awarding of a B.S. and Master of Teaching. Students begin professional studies early in the program. A student in the extended program must maintain a GPA of at least 2.8 for admission to teacher preparation (generally in the third year) and a minimum GPA of 3.0 to be admitted to the graduate portion of the program. Admission to graduate study typically occurs during the fourth year of study.

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Admission information

Any undergraduate admitted to VCU who declares a major in the College of Humanities and Sciences is eligible to declare a specialization in special education or secondary education. Students specializing in early and elementary education must declare liberal studies for early and elementary education as their major in the Bachelor of Interdisciplinary Studies program. Undergraduates admitted to VCU who wish to become teachers of health and physical education must choose the general health and physical education concentration (teacher preparation) in the B.S. in Health, Physical Education and Exercise Science program in the School of Education. Transfer students and students currently attending VCU who wish to change their majors to this program must have a minimum GPA of 2.0; however, note the much higher GPA requirement for admission to teacher preparation and then to graduate study. All students in the program, upon completion of 60 hours of undergraduate course work and prior to completion of 90 hours, must apply for admission to teacher education. To be accepted, a student must have a minimum GPA of 2.8 and must have achieved the required Commonwealth of Virginia scores on Praxis I tests and must have achieved the established composite score for the three tests. Students who pursue one of the extended teacher preparation programs follow a series of steps as noted in order to meet all requirements, including the 153/154 credits.

Step 1: Admission to the university

Requirements
a.) Scores from Scholastic Aptitude Test (SAT) or American College Test (ACT)
b.) Minimum 2.0 GPA from high school or previous college

Procedures
a.) Declare an undergraduate major in the College of Humanities and Sciences (for early and elementary or secondary education) or a major in health, physical education and exercise science with a general health and physical education concentration in the School of Education (for health and physical education).
b.) Declare an education specialization in early and elementary education, secondary education or health and physical education.

Step 2: Admission to teacher preparation

Complete before enrolling in the first practicum (upon completion of 60 credits of liberal arts and prior to completion of 90 credits).

Requirements
a.) 2.8 GPA or better
b.) Completion of six hours of English, three hours of mathematics, four hours of laboratory science and six hours of social science and/or history.
c.) Meet Virginia scores required for the mathematics portion of Praxis I and achieve a passing score on the Virginia Communication and Literacy Assessment
d.) Confirmation of education specialization (Undecided majors must decide.)
e.) Enroll in or have completed TEDU 101, EDUS 300, EDUS 301 or equivalent course

Procedures
a.) Complete Admission to Teacher Preparation Application Form (obtain in Office of Student Services) and submit a current transcript
b.) Complete TEDU 101, EDUS 300, EDUS 301 or equivalent course; submit required Praxis scores
c.) Register in dean’s office for interview upon returning Admission to Teacher Preparation Application Form; complete required interview with education program faculty
Note: Students must be admitted to Teacher Preparation Program to be eligible for practicum placement and accompanying courses. Applications for practicum are available at the Office of Student Services. (In secondary education, such applications may be distributed at the initial class meeting.)
d.) Register for, and submit required Praxis I scores

Step 3: Application to graduate studies

Requirements
a.) 3.0 GPA or better
b.) Acceptable scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT). Generally students are expected to score at least an 800 composite (Verbal and Quantitative) on the GRE or 386 on the MAT.
c.) Personal statement addressing reasons for seeking graduate education, including career goals; experience working with age group to be taught; reasons for entering teaching; and success in organizing, planning and implementing work with other individuals
d.) Three references: it is suggested that these be instructors or advisers in the College of Humanities and Sciences and the School of Education; use Graduate Studies Reference Forms

Procedures
a.) Obtain Graduate School Admissions packet from the Office of Student Services in Room 3106, Oliver Hall
b.) Return completed application packet, along with up-to-date transcripts, to the VCU Graduate School
Note: Students must be admitted to the Graduate School to be eligible to enroll in graduate-level courses. No more than six graduate credits taken prior to admission to graduate study may be accepted toward the degree.

Application deadlines for early and elementary or secondary education
- Nov. 1 for spring semester
- March 15 for summer and fall sessions

Step 4: Internship

All programs require a graduate-level internship (TEDU 672 and TEDU 674) during the fifth year. Applications for internship can be obtained in the Office of Student Services in Room 3106, Oliver Hall. Individuals in early and elementary education are placed in a kindergarten and a grade one through six classroom in the same semester. Individuals in secondary education typically have a single placement, although perhaps with two different teachers. Individuals in health and physical education typically have two placements: one and the elementary level and another at the secondary level.

Requirements
a.) 3.0 GPA or better on graduate courses
b.) Admission to teacher preparation and to graduate study
c.) Completed application and transcripts submitted by established deadlines

Procedures
a.) Obtain application form from the Office of Student Services.
b.) Submit copies of transcripts and required statement to a professional studies adviser for review.

c.) Obtain approval signature of professional studies adviser.

d.) Submit completed application to Office of Student Services by Sept. 15 for the following spring semester; by March 1 for the following fall semester.

Step 5: Admission to the profession
(during the final semester of enrollment)

Requirements
a.) Completion of all degree requirements
b.) Completion of application for initial teacher licensure (obtain from Office of Student Services)

Procedures
a.) Complete applications for undergraduate degree in humanities and sciences or health, physical education and exercise science with academic major adviser, and graduate degree in teaching with professional studies adviser.

b.) Submit application for initial teacher licensure with signature of university supervisor or professional studies adviser to the Office of Student Services.

Added or add-on endorsements

Added or add-on endorsements Teaching English as a Second Language

The School of Education offers the Virginia Department of Education ESL preK-12 endorsement for pre-service and in-service teachers. The ESL endorsement program at VCU requires 18 credit hours of ESL course work and 6 credit hours of a modern foreign language. Candidates must complete the following courses:

<table>
<thead>
<tr>
<th>ESL qualifying courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL/LING/ANTH 390 Introduction to Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL/LING/TEDU 552 Teaching English as a Second Language</td>
<td>3</td>
</tr>
<tr>
<td>TEDU 561 Reading Foundations</td>
<td>3</td>
</tr>
<tr>
<td>TEDU 562 Teaching Reading in the Content Areas</td>
<td>3</td>
</tr>
<tr>
<td>TEDU/FRLG 575 Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>TEDU 681 Investigations and Trends in Teaching (ESL)</td>
<td>3</td>
</tr>
<tr>
<td>Foreign language courses (modern languages only)</td>
<td>6</td>
</tr>
</tbody>
</table>

Total 24

Add-on endorsements in grades 6 through 12, science

Add-on endorsements in science are available in biology, chemistry, earth science and physics. Each add-on requires a first endorsement in one science and at least 18 semester hours in the add-on science that includes preparation in specified areas. The earth science added endorsement is listed below. For information about the added endorsements in biology, chemistry or physics, contact the Department of Teaching and Learning.

Earth science

To add an earth science endorsement to an endorsement in another science discipline, the individual must earn at least 18 semester hours in the earth sciences, including preparation in geology, oceanography, meteorology and astronomy. Courses to meet these requirements include:

- GEOG/ENVS and GEOZ/ENVZ 105 Physical Geology and Laboratory
- GEOG/ENVS and GEOZ/ENVZ 335 Environmental Geology and Laboratory
- GEOG/ENVS 411 Oceanography
- GEOG/ENVS 401 Meteorology and Climatology
- GEOG/ENVS 302 Physical Geology
- GEOG/ENVS 304 Historical Geology
- GEOG/ENVS 305 Marine Geology
- GEOG/ENVS 306 Environmental Geomorphology
- GEOG/ENVS 307 Geomorphology
- GEOG/ENVS 308 Principles of Geomorphology
- GEOG/ENVS 309 Geomorphology of Rivers and Streams
- GEOG/ENVS 310 Geomorphology of Lakes and Streams
- GEOG/ENVS 311 Geomorphology of Coastal Environments
- GEOG/ENVS 312 Geomorphology of Upland Environments
- GEOG/ENVS 313 Geomorphology of Eolian Environments
- GEOG/ENVS 314 Geomorphology of冻土
- GEOG/ENVS 315 Geomorphology of Periglacial Environments
- GEOG/ENVS 316 Geomorphology of Subglacial Environments
- GEOG/ENVS 317 Geomorphology of Supraglacial Environments
- GEOG/ENVS 318 Geomorphology of Glacial Environments
- GEOG/ENVS 319 Geomorphology of Ice Cap Environments
- GEOG/ENVS 320 Geomorphology of Ice Sheet Environments
- GEOG/ENVS 321 Geomorphology of Glacial Lakes and Streams
- GEOG/ENVS 322 Geomorphology of Glacial Melting
- GEOG/ENVS 323 Geomorphology of Glacial Sedimentation
- GEOG/ENVS 324 Geomorphology of Glacial Erosion
- GEOG/ENVS 325 Geomorphology of Glacial Deposition
- GEOG/ENVS 326 Geomorphology of Glacial Stratigraphy
- GEOG/ENVS 327 Geomorphology of Glacial Landforms
- GEOG/ENVS 328 Geomorphology of Glacial Landform Evolution
- GEOG/ENVS 329 Geomorphology of Glacial Landform Dynamics
- GEOG/ENVS 330 Geomorphology of Glacial Landform Classification
- GEOG/ENVS 331 Geomorphology of Glacial Landform Mapping
- GEOG/ENVS 332 Geomorphology of Glacial Landform Modeling
- GEOG/ENVS 333 Geomorphology of Glacial Landform Analysis
- GEOG/ENVS 334 Geomorphology of Glacial Landform Change
- GEOG/ENVS 335 Geomorphology of Glacial Landform Protection
- GEOG/ENVS 336 Geomorphology of Glacial Landform Restoration
- GEOG/ENVS 337 Geomorphology of Glacial Landform Management
- GEOG/ENVS 338 Geomorphology of Glacial Landform Sustainability
- GEOG/ENVS 339 Geomorphology of Glacial Landform Economics
- GEOG/ENVS 340 Geomorphology of Glacial Landform Policy

Phrases

PHYS 103 Astronomy

Elective courses to complete at least 18 hours include: GEOG 203 and 204 Physical Geography and PHYS 391 Fieldwork and Special Topics.

School of Education courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

The School of Education offers courses in the following areas:

- Use this link to see administration and supervision (ADMS) courses.
- Use this link to see adult education (ADLT) courses.
- Use this link to see athletic training (ATTR) courses.
- Use this link to see counselor education (CLED) courses.
- Use this link to see early childhood special education (ECSE) courses.
- Use this link to see educational leadership (EDLP) courses.
- Use this link to see educational studies (EDUS) courses.
- Use this link to see emotional disturbance (EMOD) courses.
- Use this link to see English education (ENED) courses.
- Use this link to see health and movement sciences (HEMS) courses.
- Follow these links to see health, physical education and exercise science (HPEX) courses or the (HPEZ) laboratories.
- Use this link to see interdisciplinary developmental disability studies (IDDS) courses.
- Use this link to see mental retardation (MNRT) courses.
- Use this link to see reading (READ) courses.
- Use this link to see reading and study skills (RDSS) courses.
- Use this link to see rehabilitation and movement science (REMS) courses.
- Follow these links to see recreation, parks and sport management (RPSM) courses or the (RPSZ) laboratories.
- Use this link to see special education and disability policy (SEDP) courses.
- Use this link to see special education – learning disabilities (SELD) courses.
- Use this link to see sport leadership (SPTL) courses.
- Use this link to see teacher education (TEDU) courses.

Undergraduate information

Four-year programs

General degree requirements

A student enrolled in the Bachelor of Science in Health, Physical Education and Exercise Science must maintain a minimum cumulative GPA of 2.5 to be eligible to participate in clinical experiences, and must complete a minimum of 123 credits in teacher education in health and physical education and 126 credits in any of the majors in exercise science. The optional concentrations require additional course work.

The School of the Arts offers a Bachelor of Fine Arts in Art Education, Bachelor of Fine Arts in Theatre with an education concentration and a Bachelor of Music with a music education concentration. General information for those programs can be found in the “School of the Arts” section of this bulletin as well as on individual program pages.

Faculty advisement

A degree-seeking student enrolled in one of the Bachelor of Science programs of study is assigned a general faculty adviser until the completion of 45 credit hours and attainment of the minimum cumulative GPA. Upon the achievement of these criteria, students are assigned a faculty adviser with specific expertise in the selected program of study: applied health science, clinical exercise science, community health education or teacher education in health and physical education.
Although advisers will provide timely and accurate assistance, the student is ultimately responsible for satisfying degree requirements in a given academic program. Students in the School of Education are expected to obtain a student account through eServices@VCU so that they may access students and faculty through e-mail. This means of communication can enhance advising when student and faculty schedules are at variance.

Change of major and transfer students
A student with a minimum GPA of 2.0 can transfer to a four-year program in the School of Education from another school in the university. Change of Major/Minor forms are available from the Office of Records and Registration. Students must meet with the director of undergraduate advising for the Bachelor of Science degree program before change of majors will be accepted. A transfer student with a minimum GPA of 2.0 also is eligible to become a degree-seeking student in a four-year program in the School of Education. Both change of major and transfer students pursuing a degree in teacher education in health and physical education must meet criteria for admission to teacher preparation. It must be noted that a minimum GPA of 2.8 is required for admission to clinical experiences.

Transcript evaluation
For the four-year program leading to a Bachelor of Science degree, the department chair and/or director of undergraduate advising evaluate prospective students’ transcripts for change of major and transfer. The School of the Arts evaluates its prospective students’ portfolios and transcripts.

For each four-year program in teacher education, a student must present at least 30 semester hours of acceptable course work to be admitted to the Teacher Preparation Program.

The Center for Sport Leadership at VCU

The Center for Sport Leadership at VCU was developed with the idea of creating an innovative, practical learning environment that would prepare students for successful careers in the sport industry. This new educational paradigm teaches students the necessary skills, while giving them ownership of operational responsibility to the organization and providing access to upper-level administrators and coaches. The Center for Sport Leadership has placed students in every area of the industry, including professional, intercollegiate, Olympic, nonprofit and grassroots organizations. These successful alumni provide a useful tool in establishing a network base for connecting with future leaders in the industry.

Administration
Sports Medicine Building
1300 West Broad Street
P.O. Box 842003
Richmond, Virginia 23284-2003
Phone: (804) 828-7821
Fax: (804) 828-4938
www.sportleadership.vcu.edu

Nathan Tomasini
Director
Carrie Le Crom
Assistant Director
Brendan Dwyer
Assistant Director

The mission of the department is to prepare reflective instructional leaders for K-12 schools and for literacy programs and corporate training centers. Through course work and other experiences, the program aims to turn out leaders who are able to develop positive school cultures through the use of communications skills and by appropriation of fiscal, material and human resources.

The department offers programs that lead to the M.Ed., Post-master’s Certificate and Ph.D. in Education with a track in educational leadership. Individuals who complete one of those programs may qualify for endorsement by the Virginia Department of Education as administrator/supervisor. An optional track M.Ed. is offered for individuals in institutions of higher education and other settings who will benefit from the study of educational leadership but do not wish to seek positions as school administrators.

For more information consult the department’s Web site at www.soe.vcu.edu/departments/el.

Department of Educational Leadership
The mission of the department is to prepare reflective instructional leaders for K-12 schools and for literacy programs and corporate training centers. Through course work and other experiences, the program aims to turn out leaders who are able to develop positive school cultures through the use of communications skills and by appropriation of fiscal, material and human resources.

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For more information consult the department’s Web site at www.soe.vcu.edu/departments/el.

Department of Foundations of Education
The Department of Foundations of Education provides multidisciplinary, liberal education perspectives that undergird all programs in the school. Our contribution is based on the premise that the preparation of effective educational practitioners requires fundamental, deep understanding of the broader perspectives that are represented by research and theory in psychological, cultural, philosophical, historical and ethical areas of inquiry. As such, the department provides an essential link between practice and theory that makes effective reflection and decision making possible. By facilitating a rich contextual understanding of contemporary educational issues and practices, the department enhances the ability of educators to be reflective decision makers who make effective use of complex judgments and critical thinking. Our goal is to prepare educators for intelligent, responsible leadership in a variety of educational careers and settings for teaching, research, administration and policy-making.

The department plays an integral part in the Ph.D. in Education program by teaching required courses in urban education and research methods and other elective courses, by active participation on dissertation committees, and by directing the Research and Evaluation Track of the program. The department also has responsibility for the Metropolitan Educational Research Consortium (MERC), a partnership between VCU and seven Richmond area school divisions to conduct and disseminate action research.

For more information consult the department’s Web site at www.soe.vcu.edu/departments/el.

Department of Counselor Education
The Department of Counselor Education at Virginia Commonwealth University is committed to excellence in the initial preparation and continuing development of professionals in the counseling field. The department, located in an urban setting, provides graduate students with research-based professional studies and clinical experiences necessary for effective counseling, advocacy and leadership in diverse geographic and socioeconomic settings. Specifically, the department prepares counselors with the specialized knowledge and skills required for placement in elementary, middle and high schools, as well as postsecondary educational institutions in the commonwealth of Virginia and throughout the nation. Consistent with this approach are the program goals of graduating students who have knowledge of basic counseling theory and practice, possess competencies in essential counseling services, exhibit scholarly inquiry, have the skills necessary to evaluate relevant research, are committed to evaluating their counseling interventions and participate in a variety of professional development activities.

Administration
Mary Hermann
Department Chair

Department of Health and Human Performance
The Department of Health and Human Performance offers programs that prepare students to pursue careers in athletic training/sports medicine, community health and/or careers that employ exercise interventions for both healthy and diseased
populations. The department offers one undergraduate degree program: Bachelor of Science in Health, Physical Education and Exercise Science. There are three concentrations within the B.S. in Health, Physical Education and Exercise Science: community health education, exercise science and general health and physical education. Optional concentrations in pre-physical therapy, pre-occupational therapy and pre-medicine also are available.

Along with the undergraduate program, the department also offers a Master of Science in Athletic Training, a Master of Science in Health and Movement Sciences, the teaching health and physical education concentration of the Master of Teaching and Doctor of Philosophy in Rehabilitation and Movement Science.

The M.S.A.T. is an entry-level program in athletic training accredited by the Commission on Accreditation of Athletic Training Education. Beginning study in July, students complete four semesters and two summer sessions in two years. Students who graduate from the program are eligible to register with the Board of Certification Inc. and take the certifying examination.

The M.S. in Health and Movement Sciences program provides advanced course work for students interested in the application of health and movement science principles to exercise science, teaching and sports medicine. This program has a central focus on the sciences and is flexible enough so that students, with the assistance of an adviser, can design a program that truly meets their professional goals. The program also offers an excellent progression of study for students that teach in the health and physical education field. The department also offers an entry level athletic training option as part of the M.S. in Health and Movement Science program.

The Master of Teaching with a concentration in teaching health and physical education is the graduate component of the five-year Extended Teacher Preparation Program which prepares students to teach health and physical education in grades K-12. Students begin study as undergraduates in the general health and physical education concentration of the B.S. in Health, Physical Education and Exercise Science program. Students apply for admission to teacher preparation and to the Graduate School during the course of undergraduate study. Upon completion of the program, students receive both the B.S. and M.T. degrees simultaneously.

The Doctor of Philosophy in Rehabilitation and Movement Science program is interdisciplinary in nature and includes faculty from the departments of Exercise Science, Physical Therapy, and Physical Medicine and Rehabilitation. Students choose either a cardiopulmonary track or one in neuromusculoskeletal dynamics.

For more information, consult the departments Web site at www.soe.vcu.edu/departments/hpe.

Adminstration

Edmund O. Acevedo
Associate Professor and Department Chair

Health, Physical Education and Exercise Science, Bachelor of Science (B.S.)

The Department of Health and Human Performance offers programs that prepare students to pursue careers in athletic training/sports medicine, community health and/or careers that employ exercise interventions for both healthy and diseased populations. The department offers one undergraduate degree program: Bachelor of Science in Health, Physical Education and Exercise Science. There are three concentrations within the program: community health education, exercise science and general health and physical education. The latter concentration is intended for students in the five-year Extended Teacher Preparation Program who are preparing to be health and physical education teachers. Optional concentrations in pre-physical therapy, pre-occupational therapy and pre-medicine also are available.

Community health education concentration

The community health education curriculum prepares students for health-related careers in private, public, medical and corporate sectors. Students in this program concentration are prepared to assist in the development of healthy communities through the implementation of dynamic and ongoing health education/health promotion programs across the life span. Career opportunities include community health educator, public health specialist, health promotion specialist and health-related research.

A 2.5 cumulative GPA is required to transfer into the community health education concentration from another concentration, degree program or undeclared status. A minimum grade of C is required in all core, selective, specialty and clinical experience courses in order to fulfill the degree requirements. A 2.5 cumulative GPA is required for entry into practicum and clinical experiences. All students must take the national Certified Health Education Specialist examination prior to graduation.

Program of study

<table>
<thead>
<tr>
<th>General education</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL and BIOZ.101 Biological Concepts and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 205 Basic Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>MATH 131 Introduction to Contemporary Mathematics or equivalent</td>
<td>3</td>
</tr>
<tr>
<td>PHIS and PHIZ 206 Human Physiology and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 101 Introduction to Psychology</td>
<td>4</td>
</tr>
<tr>
<td>SOCY 101 General Sociology</td>
<td>3</td>
</tr>
<tr>
<td>STAT 210 Basic Practice of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 111 Focused Inquiry I</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry II</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and fine arts elective</td>
<td>3</td>
</tr>
<tr>
<td>Oral communications elective</td>
<td>3</td>
</tr>
</tbody>
</table>

40

Community health education foundations and skills core

| HPEX 356 Community Health Education and Promotion: Theory and Practice | 3 |
| HPEX 450 Program Planning and Evaluation | 3 |
| HPEZ 450 Service-learning in Community Health Education | 1 |
| Program Planning and Evaluation | 1 |
| HPEX 451 Professional Conference in Community Health Education | 1 |

8

Community health education content core

| HPEX 200 Strength, Endurance and Flexibility Training | 3 |
| HPEX 250 Medical Terminology | 1 |
| HPEX 300 Health Care Delivery in the U.S. | 3 |
| HPEX and HPEZ 334 Measurement and Analysis in Teaching and Exercise Science and laboratory | 4 |
| HPEX 350 Nutrition | 3 |
| HPEX 352 Substance Abuse | 3 |
| HPEX 353 Trends in Modern Diseases | 3 |
| HPEX 354 Coping and Adaptation | 3 |
| HPEX 355 School and Community Health Resources | 3 |
| HPEX 357 Personal Health and Behavior Change | 3 |
| HPEX 375 and HPEZ 375L Physiology of Exercise and Laboratory | 4 |
| HPEX 445 Organization and Administration for Health Professions | 3 |
| PHIL 213 Ethics and Health Care | 3 |
| PSYC 412 Health Psychology | 3 |

42

Community health education selective

Select 3 hours from the following courses:

| HPEX 271 Safety, First Aid and CPR | 3 |
| HPEX 351 Issues in Sexuality or SOCS 340 Human Sexuality | |
| HPEX 371 Psychology of Physical Activity | |
| HPEX 431 Adapted Physical Activity | |
| HPEX 440 Chronic Disease and Exercise Management | |
| HPEX 441 Assessment and Exercise Intervention in Health and Disease | |

3

Community health education specialty

Develop a CHE specialty with 12 credit hours; (Selected courses require adviser’s approval)

12
### Program of study

**Credits**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General education</strong></td>
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<tr>
<td>BIOL 101 and BIOZ 101 Biological Concepts and Laboratory or</td>
<td>4</td>
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<tr>
<td>BIOL 151 and BIOZ 151 Introduction to Biological Science I and</td>
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</tr>
<tr>
<td>Laboratory</td>
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<tr>
<td>BIOL 205 Basic Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 110 Chemistry and Society or CHEM 101 and CHEZ 101</td>
<td>3 or 4</td>
</tr>
<tr>
<td>General Chemistry and Laboratory*</td>
<td></td>
</tr>
<tr>
<td>MATH 131 Introduction to Contemporary Mathematics or MATH 151</td>
<td>3 or 4</td>
</tr>
<tr>
<td>Precalculus Mathematics†</td>
<td></td>
</tr>
<tr>
<td>PHIS 206 and PHIZ 206 Human Physiology and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101 and PHYZ 101 Foundations of Physics and Laboratory or PHYZ</td>
<td></td>
</tr>
<tr>
<td>107 Wonders of Technology or PHYS 201 General Physics*</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 101 Introduction to Psychology</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 304 Life Span Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>STAT 210 Basic Principles of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 111 Focused Inquiry I</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry II</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities and fine arts elective</td>
<td>3</td>
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<td><strong>Total credits</strong></td>
<td>44-46</td>
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</table>

**Exercise science required core**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HPEX 200 Strength, Endurance and Flexibility Training</td>
<td>3</td>
</tr>
<tr>
<td>HPEX 300 Health Care Delivery in the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>HPEX 334 Measurement and Analysis in Teaching and Exercise Science</td>
<td>3</td>
</tr>
<tr>
<td>HPEX 334 Measurement and Analysis in Teaching Exercise Science</td>
<td>3</td>
</tr>
<tr>
<td>Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>HPEX 350 Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HPEX and HPEZ 375 Physiology of Exercise and Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>HPEX 440 Chronic Disease and Exercise Management</td>
<td>3</td>
</tr>
<tr>
<td>HPEX 445 Organization and Administration for Health Professions</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td>23</td>
</tr>
</tbody>
</table>

**Exercise science selectives**

Choose courses from the list below for remaining credits (17-19 hours depends on required core total) to satisfy the 120-hour requirement for graduation.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 152 and BIOZ 152 Introduction to Biological Science II and</td>
<td>4</td>
</tr>
<tr>
<td>Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 218 Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 102 and CHEZ 102 General Chemistry and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 301 and CHEZ 301 Organic Chemistry and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 302 and CHEZ 302 Organic Chemistry and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 403 Biochemistry I</td>
<td>3</td>
</tr>
<tr>
<td>HPEX 250 Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>HPEX 271 Safety, First Aid and CPR</td>
<td>3</td>
</tr>
<tr>
<td>HPEX 332 Motor Learning and Performance</td>
<td>3</td>
</tr>
<tr>
<td>HPEX 353 Trends in Modern Diseases</td>
<td>3</td>
</tr>
<tr>
<td>HPEX 354 Coping and Adaptation</td>
<td>3</td>
</tr>
<tr>
<td>HPEX 371 Psychology of Physical Activity</td>
<td>3</td>
</tr>
<tr>
<td>HPEX 431 Adapted Physical Activity</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 213 Ethics in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 202 General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 308 Stress and its Management</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 309 Personality</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 401 Physiological Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 407 Psychology of the Abnormal</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 412 Health Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 445 Medical Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Other adviser approved courses</td>
<td></td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td>17-19</td>
</tr>
</tbody>
</table>

**General health and physical education concentration (teacher preparation)**

The general health and physical education concentration requires 120 credits within a pre-professional program. It is the required concentration for students who intend to become health and physical education teachers. This program is the undergraduate component of the Extended Teacher Preparation Program in the School of Education. Completion of the extended program takes an additional year and results in the simultaneous awarding of a Bachelor of Science in Health, Physical Education and Exercise Science (general health and physical education) and a Master of Teaching degree (teaching health and physical education). The Bachelor of Science degree is open only to students who will enroll in the extended program and is not intended to be a stand-alone baccalaureate degree.

The required course work is listed below.

### Curriculum

**General education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL and BIOZ 101 Biological Concepts and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 205 Basic Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>EDUS 300 Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUS 301 Human Development and Learning</td>
<td>3</td>
</tr>
<tr>
<td>MATH 131 Introduction to Contemporary Mathematics or equivalent</td>
<td>3</td>
</tr>
<tr>
<td>PHIS 206 and PHIZ 206 Human Physiology and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>Laboratory</td>
<td></td>
</tr>
<tr>
<td>UNIV 111 Focused Inquiry I</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry II</td>
<td>3</td>
</tr>
</tbody>
</table>
Classroom Management

Obtain acceptable scores on the Graduate Record Exam or the Miller Analogies Test

Have a 2.5 cumulative grade point average

4 credits in a physical or biological sciences

3 credits in mathematical sciences

Have a 3.0 cumulative grade point average

Total..532

Reading.178

Writing..176

TEDU 531 Collaboration and Special Education Law

Mathematics..178

12 credits in focused inquiry courses

www.soe.vcu.edu/

Step 1: Apply for admission to Teacher Education Preparation Program

Upon completion of 60 credits and prior to completion of 90 credits students must meet the following criteria:

1. Have a 2.5 cumulative grade point average

2. Complete the course work below:
   a. 6 credits in focused inquiry courses
   b. 3 credits of English
   c. 3 credits in mathematical sciences
   d. 4 credits in a physical or biological sciences

Step 2: Apply for admission to the Graduate School

Upon completion of 90 credits students must apply to graduate school and meet the following criteria:

- Have a 3.0 cumulative grade point average
- Obtain acceptable scores on the Graduate Record Exam or the Miller Analogies Test

Department of Special Education and Disability Policy

The mission of the Department of Special Education and Disability Policy is to prepare skilled, effective professionals who can meet the educational needs of children and youth with disabilities and their families through graduate degree programs, discover new instructional and service delivery strategies through an ongoing program of research, and share information on these strategies to a wide audience through collaborative relationships with children and youth with disabilities, their families, educators, local, state and federal government agencies, and other professionals throughout the commonwealth and across the nation.

The department offers extended teacher preparation programs that allow students to prepare for professional roles as teachers of students with emotional disturbance, learning disabilities, or mental retardation. These five-year programs culminate in the simultaneous awarding of both a bachelor’s degree from the College of Humanities and Sciences and a Master of Teaching degree from the School of Education.

At the graduate level, the department offers five Master of Education programs. Successful completion of one of the degree programs leads to endorsement in early childhood special education, emotional disturbance, learning disabilities, mental retardation or severe disabilities. In addition, the department offers a Ph.D. in Education with an emphasis on Special Education and Disability Policy. For more information consult the department’s Web site at www.soe.vcu.edu/departments/sedp.

Administration

John J. Kregel
Professor and Department Chair

Foundations of special education, minor in

The minor provides an opportunity to explore the field of special education and disabilities, for focused investigation of human behavior within the context of educational institutions or explorations related to possible or real career needs. Completion of this minor does not result in licensure or endorsement for teaching in the commonwealth of Virginia.

The minor requires a minimum of 21 semester hours. If one or more of these courses is taken to satisfy a general studies requirement or a major requirement, it may also be counted toward the minor.

- EDUS 300 Foundations of Education
- EDUS 301 Human Development and Learning or EDUS/PSYC 305 Educational Psychology
- TEDU 330 Survey of Special Education
- Selectives (select any four):
  - TEDU 444 Introduction to Learning Disabilities
  - TEDU 531 Collaboration and Special Education Law
Department of Teaching and Learning

The Department of Teaching and Learning is committed to excelling in the initial and continuing preparation of teachers for the commonwealth, with particular emphasis on early childhood through secondary education in diverse settings; to collaborating with colleagues in educational agencies; to applying research about learning in classrooms; to undertaking scholarly endeavors that examine learning and teaching processes; and to providing technical assistance to special populations and service to school divisions and agencies.

The department values:

- Providing the highest quality teaching and opportunities for learning.
- Integrating academic disciplines, professional studies and clinical experiences as program components for student learning.
- Collaborating in the preparation of teachers and in the continuing development of faculty both within the university and in public and private educational settings.
- Enabling teachers and intending teachers to work effectively with students from diverse populations and those with special needs.
- Helping intending teachers become effective decision makers and practicing teachers refine their decision-making skills in the roles for which they are preparing.
- Effectively modeling the use of technology to enhance and foster learning.
- Incorporating, among others, developmental, cognitive and functional approaches and content areas in the preparation of personnel in early, middle, secondary and special education programs.
- Serving the university through faculty participation in institutional committees and task forces, programs, and supportive research and service institutes and centers within the university.
- Serving the community through technical assistance, workshops, consulting education activities, Professional Development Schools and other partnerships.

The Department of Teaching and Learning houses the following degree and certificate granting programs.

- Master of Education in Curriculum and Instruction
- Master of Education in Reading
- Master of Teaching
- Post-baccalaureate Graduate Certificate in Instructional Technology
- Post-baccalaureate Graduate Certificate in Teaching (Secondary)
- Post-master’s Certificate in Reading Specialist
- Ph.D. in Education

For more information consult the department’s website at www.soe.vcu.edu/departments/tl.

Admission

Additional information about the liberal arts requirements for early childhood/elementary, middle and secondary is listed under the pertinent program in the Department of Teaching and Learning section of the Undergraduate Bulletin.

State licensure examination

Successful completion (defined as meeting or exceeding the scores established by the Virginia State Board of Education) on the state-mandated licensure examination, currently Praxis I, is required for admission to teacher preparation.

Requirements for both initial licensure and added endorsements include taking and achieving state-established pass scores on the Praxis II specialty area tests.
Standards of Learning
Much of the pre-kindergarten through grade 12 curriculum is based on the commonwealth of Virginia’s current Standards of Learning (SOLs). Individuals preparing to be teachers are advised to examine the SOLs for the grade levels and content areas they plan to teach. Since the content and concepts associated with one or more SOLs may be incorporated into a course in the College of Humanities and Sciences curriculum and not a college curriculum, one may need to study several of these SOLs on his/her own. The Department of Teaching and Learning Web site, connected to the School of Education Web page has a link to the SOLs.

Technology standards
The use of computers, graphing calculators, science probeware and other technologies is integral to successful teaching in today’s schools. Individuals preparing to teach must be competent on each of the eight standards in Virginia’s Technology Standards for Instructional Personnel. These standards may be reached through the Department of Teaching and Learning Web page.

Students are advised to consult with the professional studies adviser regarding the program’s requirements for demonstrating competence. Several of the standards may be documented as met by passing the Computer Literacy Examination offered online through Knowledgenet.

Early and elementary education
Freshman students bound for the Master of Teaching program with a concentration in early and elementary education are required to enroll in the Bachelor of Interdisciplinary Studies — liberal studies for early and elementary education major. This program offers liberal studies curriculum designed through an interdisciplinary collaboration among professors in the College of Humanities and Sciences and the School of Education in consultation with successful area teachers. It targets core knowledge across the four major subject areas represented in Virginia’s Standards of Learning (mathematics, sciences, social sciences and language arts/communication) while also providing a university-level skill set and knowledge base. Throughout the undergraduate program, contact with area schools and young learners is programmed into service and experiential learning venues.

Transfer students intending to be elementary teachers (and completing the Master of Teaching in Early and Elementary Education) are required to meet with advisors for the LSEE track prior to registering for courses. Advisors will evaluate all courses successfully completed outside of the LSEE track prescribed curriculum (from VCU or elsewhere) to determine their transferability to the LSEE track.

Majors are encouraged to select at least one minor in order to deepen knowledge and appreciation of a subject area. Philosophy, religious studies, African American studies and international studies have relevance in their understanding of human investigation of knowledge, human behavior and world cultures. A minor in a science area like environmental studies may be more “employable” because of school and societal concerns about our planet and its preservation. Whatever the humanities and sciences minor, the choice should be based on the student’s interest and perceived relevance.

Consult with the appropriate professional studies adviser for additional information regarding professional studies and liberal arts requirements.

Program requirements – mathematics and statistical reasoning
The general education requirement is three to six credits; the Early Childhood/Elementary Education Program requirement is six credits, including three credits in mathematics at the college algebra level or higher and three credits in a statistics course typically taught by a college department of mathematics. Choosing among these courses is recommended:

<table>
<thead>
<tr>
<th>Credits</th>
<th>Biological sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>BIOL and BIOZ 101 Biological Concepts and Laboratory</td>
</tr>
<tr>
<td>5</td>
<td>BIOL 102 and BIOZ 102L Science of Heredity and Laboratory</td>
</tr>
<tr>
<td>5</td>
<td>BIOL/ENV 103 Environmental Science and Laboratory</td>
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</table>

<table>
<thead>
<tr>
<th>Credits</th>
<th>Physical sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>CHEM 110 and CHEZ 110L Chemistry and Society and Laboratory</td>
</tr>
<tr>
<td>3</td>
<td>CHEM 112 Chemistry in the News</td>
</tr>
<tr>
<td>4</td>
<td>PHYS 101 and PHYZ 101L Foundations of Physics and Laboratory</td>
</tr>
<tr>
<td>4</td>
<td>PHYS 107 Wonders of Technology</td>
</tr>
</tbody>
</table>

Program requirements – applied arts
Two to three credits in applied arts to be designated with the professional studies adviser.

Program requirements – natural sciences
The general education requirement is seven to nine credits, with one course each from the physical sciences and the biological sciences, with at least one laboratory; the program requirement is 12 credits, again with at least one course each in the physical sciences and the biological sciences, and two laboratories. Choosing among these courses is recommended:

<table>
<thead>
<tr>
<th>Credits</th>
<th>Health and physical education</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>EDUS 607/PSYC 607 Advanced Educational Psychology</td>
</tr>
<tr>
<td>3</td>
<td>EDUS 673 Seminar on Educational Issues Ethics and Policy</td>
</tr>
</tbody>
</table>

Note: At least 33 credit hours must be taken at the graduate level.

Program requirements
The undergraduate program requires 120/121 credits. To view undergraduate requirements, please see the general health and physical education track of the B.S. in Health and Physical Education of this Bulletin.

Graduate requirements are as follows:

<table>
<thead>
<tr>
<th>Credits</th>
<th>Health and physical education</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>EDUS 607/PSYC 607 Advanced Educational Psychology</td>
</tr>
<tr>
<td>3</td>
<td>EDUS 673 Seminar on Educational Issues Ethics and Policy</td>
</tr>
</tbody>
</table>
Secondary education, 6-12

The Master of Teaching program includes curricula that lead to endorsement in one of the following disciplines: biology, chemistry, drama, earth science, English, history/social studies, mathematics and physics.

In order to enroll in the program, students must apply and be accepted to both the Extended Teacher Preparation Program and the Graduate School. Admission information for the Extended Teacher Preparation Program is available in the School of Education section of this Bulletin.

Student teaching requirements
All students pursuing a secondary education endorsement within the Master of Teaching program will student teach in the spring semester only. To do so, students must take and pass the VCLA and their subject-specific Praxis II exams before the fall semester of the academic year in which they will student teach.

Concentrations (endorsement disciplines)
- English
- History/social studies
- Mathematics
- Sciences of biology, chemistry, earth science and physics

English curriculum

Qualifying courses (taken as an undergraduate)
EDUS 301 Human Development and Learning

Admission to teacher preparation is a prerequisite for the following courses
TEDU 310 Practicum* (secondary; must be taken concurrently with TEDU 537)
TEDU 537 Secondary School Curriculum*
TEDU 537 Practicum* (English; must be taken concurrently with TEDU 548)
TEDU 548 Teaching Secondary School English* (fall only)

Required courses
EDUS/PSYC 607 Advanced Educational Psychology
EDUS 673 Seminar on Educational Issues, Ethics and Policy
ENGL/ENED 601 Young Adult Literature
TEDU 562 Reading Instruction in the Content Area
TEDU 588 Classroom Management

Clinical experience (spring only)
TEDU 672 Internship
TEDU 674 Internship II
TEDU 681 Investigation and Trends in Teaching (English; must be taken concurrently with TEDU 672 and TEDU 674)

Back to top

History/social studies curriculum

Qualifying courses (taken as an undergraduate)
EDUS 301 Human Development and Learning

Major courses

As undergraduate history majors
Political science (12 credits) – including 6 credits 100-level U.S. and international politics and 6 credits 300-level local and international politics
Geography (9 credits) – including 3 credits of physical geography and 6 credits of cultural geography
Economics (6 Credits) – macro- and microeconomics

As undergraduate political science majors
Economics (6 Credits) – macro- and microeconomics

History (18 credits)
Geography (9 credits) – including 3 credits of physical geography and 6 credits of cultural geography
Economics (6 Credits) – macro- and microeconomics

Admission to teacher preparation is a prerequisite for the following courses
TEDU 310 Practicum* (secondary; must be taken concurrently with TEDU 537)
TEDU 537 Secondary School Curriculum*
TEDU 530 Practicum* (history/social studies; must be taken concurrently with TEDU 547)
TEDU 547 Teaching Secondary School Social Studies* (fall only)

Required courses
EDUS/PSYC 607 Advanced Educational Psychology
EDUS 673 Seminar on Educational Issues, Ethics and Policy
TEDU 562 Reading Instruction in the Content Area
TEDU 588 Classroom Management

Electives (choose one of the following courses)
EDUS 610 Social Foundations of Education
SEDP 505 Theory and Practice of Educating Individuals with Special Needs
SEDP 531 Educational Foundations for Collaboration and Universally Designed Learning
TEDU 556 Advanced Computer Applications in Education
SEDP 631 Classroom Management and Behavior Support for Students with Disabilities

Clinical experience (spring only)
TEDU 672 Internship
TEDU 674 Internship II
TEDU 681 Investigation and Trends in Teaching (social studies; must be taken concurrently with TEDU 672 and TEDU 674)

Back to top

Science curriculum

Qualifying courses (taken as an undergraduate)
EDUS 301 Human Development and Learning

Major courses

As undergraduate science majors
Biology – genetics/molecular biology, botany, zoology, anatomy/human physiology, ecology, two physics and one earth science
Chemistry – inorganic chemistry, organic chemistry, physical chemistry, analytical chemistry, two physics, two general biology and one earth science
Earth science – oceanography, meteorology/climatology, astronomy, geology, ecology, two general biology, two physics and two general chemistry
Physics – mechanics, electricity and magnetism, optics, two general biology, two general chemistry, and one earth science

Admission to teacher preparation is a prerequisite for the following courses
TEDU 310 Practicum* (secondary; must be taken concurrently with TEDU 537)
TEDU 537 Secondary School Curriculum*
TEDU 310 Practicum* (science; must be taken concurrently with TEDU 540)
TEDU 540 Teaching Middle and High School Sciences* (fall only)

Required courses
EDUS/PSYC 607 Advanced Educational Psychology
EDUS 673 Seminar on Educational Issues, Ethics and Policy
TEDU 562 Reading Instruction in the Content Area
TEDU 588 Classroom Management

Clinical experience (spring only)
TEDU 672 Internship
TEDU 674 Internship II
TEDU 681 Investigation and Trends in Teaching (social studies; must be taken concurrently with TEDU 672 and TEDU 674)
Through teaching and research, the VCU School of Engineering creates knowledge and transforms ideas in engineering and life sciences into technologies that enhance regional and global prosperity. The school prepares its students for leadership and entrepreneurship through collaborative and interdisciplinary partnerships.

Founded in 1995 and graduating its first class in May 2000, the School of Engineering is the result of collaboration rare in the history of higher education in Virginia. Virginia Commonwealth University has, with the support of Virginia Polytechnic Institute and State University, created a school that brings innovative engineering and computer science education to central Virginia. Building reciprocal relationships with business and industry in the greater Richmond area, contributing to the region’s manufacturing enterprises and aggressively developing an international orientation, the school has developed programs of research and study that are sensitive to the unique demands of its time and culture.

In 1998, the undergraduate degree program in biomedical engineering was added to the original engineering disciplines of chemical, electrical and mechanical engineering, which were established in 1996. The long-standing and accredited degree program of computer science was assimilated into the School of Engineering beginning with the fall 2001 semester. In 2004-05, the chemical engineering department added an emphasis in life sciences and changed its name to the Department of Chemical and Life Science Engineering.

Students are offered an integrated and multidisciplinary curriculum in biomedical, chemical and life science, computer, electrical, or mechanical engineering, or computer science. Supported by the internationally recognized strengths of MCV Hospitals and the cutting-edge developments being generated by the Virginia BioTechnology Research Park, the School of Engineering at VCU has innovative curricula that emphasize creativity and imagination. By encouraging their interaction with practicing professionals, students are continually aware of the real-world application of their research and their studies.

Serving the best and the brightest students and supporting VCU’s dedication to diversity by opening doors of opportunity to underrepresented populations in the engineering and computer science professions, the school continually strives to enrich the technological and intellectual climate of the metropolitan area.

Discovering new knowledge is the goal of the best of the nation’s schools. The School of Engineering at VCU celebrates not only the discovery of knowledge, but also the creative integration and application of that knowledge.

**Administration**

601 West Main Street
P.O. Box 843068
Richmond, Virginia 23284-3068
(804) 828-0190 or (804) 828-3925
Fax (804) 828-9866 or (804) 828-4269
www.egr.vcu.edu

J. Charles Jennett
Interim Dean

Roslyn S. Hobson
Associate Dean for Graduate Studies

Afroditi V. Filippas
Interim Associate Dean for Administration and Finance

**Accreditation**

The Accreditation Board for Engineering and Technology is the premier organization in the U.S. that provides accreditation to engineering and computer science programs. Individual programs (i.e., mechanical engineering) are accredited at the bachelor’s level.

The Engineering Accreditation Commission of ABET has accredited the Biomedical, Chemical and Life Science, Electrical and Computer, and Mechanical engineering programs at the VCU School of Engineering.

The Computer Accreditation Commission of ABET has provided accreditation to the Computer Science Program for many years.

**Degree programs**

The School of Engineering offers the following degree programs:

**Bachelor of Science**

Biomedical Engineering
Chemical and Life Science Engineering
Computer Engineering
Computer Science
Electrical Engineering
Mechanical Engineering

Students also may be admitted under “Undeclared Engineering” for entrance to the School of Engineering. A field of study can be determined after the first semester.

**Master of Science**

Biomedical Engineering

Engineering – with tracks in:
- Chemical and Life Science Engineering
- Electrical and Computer Engineering
- Engineering

Mechanical and Nuclear Engineering

**Doctor of Philosophy**

Biomedical Engineering

Engineering – with tracks in:
- Chemical and Life Science Engineering
- Computer Science
- Electrical and Computer Engineering
- Engineering
- Mechanical Engineering

**Joint degree**

M.D./Ph.D. in Biomedical Engineering in participation with the School of Medicine

**Interdisciplinary and cooperative studies degree**

M.S. degree through the Commonwealth Graduate Engineering Program

**Post-baccalaureate certificate**

Computer Science

**Engineering courses**

Descriptions for all courses offered by the university may be accessed through the online courses database at [www.pubapps.vcu.edu/veucourses](http://www.pubapps.vcu.edu/veucourses). You may search by unit, subject or keyword, as well as by degree level.

Follow these links to engineering (ENGR) courses or the (ENGZ) laboratories.

**Undergraduate information**

**Academic policies for undergraduates**

Students majoring in biomedical, chemical and life science, computer, electrical or mechanical engineering or computer science must attain a minimum grade of C in all major courses taken. If a student receives a grade below C in any major course, that course must be retaken until the student receives a minimum grade of C. Department chairs may also identify other vital courses (i.e., math, physics) within the major for which a minimum grade of C must be achieved.

Because of the rotating nature of higher level technical electives in the computer science program and the student’s planned graduation date, computer science students may not be able to take advantage of the repeat course option offered by the university. Students should be aware of this rotating schedule and plan accordingly.

In some cases, students may be required to take foundation courses as the result of placement tests in order to prepare themselves to enter the required courses in
mathematics, sciences or languages. Credit received for these foundation courses does not count toward the baccalaureate degree.

Appeals to the School of Engineering policies

Students may appeal the above School of Engineering policies. In order to do so, they must prepare a letter to the School of Engineering Policy Appeals Committee stating why they should be given an exception to these policies and providing any documentation required. The letter should be delivered to the dean’s office and will be forwarded to the committee for consideration.

Graduation requirements

Students in the majors of biomedical, chemical and life science, computer, electrical, and mechanical engineering must complete a minimum of 130 credit hours to be eligible for the bachelor’s degree.

Students in chemical and life science engineering must complete a minimum of 127 credit hours to be eligible for a bachelor’s degree.

Students in computer science must complete a minimum of 120 credit hours to be eligible for the bachelor’s degree.

Requirements for the bachelor’s degrees offered by the School of Engineering (engineering disciplines and computer science) include university undergraduate requirements (refer to the “Academic Regulations and General Degree Requirements” section in this bulletin), general education requirements and program-level degree requirements.

Students seeking the bachelor’s degree for any of the programs within the School of Engineering (computer science or biomedical, chemical and life science, computer, electrical, or mechanical engineering) are responsible for understanding the specific and unique requirements of the individual programs and must complete all of them to be eligible for the granting of the degree sought.

Double majors (B.S.) in engineering and physics

This program provides biomedical, chemical and life science, electrical, computer, and mechanical engineering majors the opportunity to earn a double major in physics, requiring an additional 13 to 19 credits beyond the hours required for the primary engineering major. The requirements for the double major are the same as those in the program description for the Bachelor of Science in Physics. Within the double major, a select number of engineering courses are acceptable substitutes for required physics courses, as follows:

- CLSE 204 or EGRM 204 for PHYS 340
- EGRE 309 for PHYS 376
- Senior Design course sequence for PHYS 450 and 490 (see individual program pages for appropriate sequence)

In addition, select engineering-related courses can be used to satisfy the required nine credits of elective physics and physics-related courses, as detailed in the program description for the B.S. in Physics. Listed below are the total credits and required courses necessary for biomedical, chemical and life science, computer, electrical, and mechanical engineering majors to complete a double major in physics. In addition, the courses that are used from the primary engineering major toward fulfillment of the physics major are provided.

**Biomedical engineering** (19 credits): MATH 307; PHYS 301, 320, 340, 376, 380 and PHYZ 320 (one credit).

- Necessary courses used from the biomedical engineering major include: EGRB 303, 401-402 and 427; MATH 310; PHYS 207 and 208; STAT 541.

**Chemical and life science engineering** (19 credits): MATH 307; PHYS 301, 320, 376, 380, and PHYZ 320 and a three-credit physics elective.*

- Necessary courses used from the chemical and life science engineering major include: CLSE 204, 301; ENGR 402, 403 and ENGZ 402, 403; PHYS 207, 208; STAT 541.

**Electrical and computer engineering** (13 credits): PHYS 301, 320, 340, 380 and PHYZ 320.

- Necessary courses used from the electrical engineering major include: EGRE 224, 303 and 307; ENGR 402, 403; PHYS 207, 208.

- Necessary courses used from the computer engineering major include: EGRE 224, 303 or 309, and 307; ENGR 402, 403; MATH 307; and PHYS 207, 208.

**Mechanical engineering** (16 credits): EGRM 436*; PHYS 301, 320, 376, 380, and PHYZ 320 and a three-credit physics elective.*

- Necessary courses used from the mechanical engineering major include: EGRM 204; ENGR 301, 402, 403 and ENGZ 402 and 403; PHYS 207, 208; STAT 541.

* Any physics/physics-related elective course as listed in the bulletin description for the B.S. in Physics.

With regard to general education requirements, students must fulfill the requirements of their primary engineering major. Any student interested in a physics double major should contact the physics undergraduate adviser, Dr. Baski at (804) 828-8295 or aaabaski@vcu.edu.

Department of Biomedical Engineering

The Department of Biomedical Engineering offers programs at the baccalaureate, master’s and doctoral level.

Biomedical engineering provides in-depth study in a variety of specialization areas including biomedical imaging systems, orthopaedic biomechanics, tissue and cellular engineering, biomaterials, artificial organs, human-computer interfaces, cardiovascular devices and rehabilitation engineering. The programs allow students to participate in cutting-edge research in one of the nations most advanced engineering facilities. The department has ongoing collaborations with numerous industries, federal laboratories, the VCU science departments, the university’s MCV Campus, the Hunter Holmes McGuire Veterans Affairs Medical Center, the Virginia BioTechnology Research Park and numerous biomedical and clinical programs throughout the VCU Medical Center’s MCV Hospitals.

Administration

Gerald E. Miller
Professor and Department Chair
www.egr.vcu.edu/bme

Biomedical engineering courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/veucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to biomedical engineering (EGRB) courses.

Follow these links to general engineering (ENGR) or the (ENGZ) laboratory.

Biomedical Engineering, Bachelor of Science (B.S.)

Biomedical engineering applies engineering expertise to analyze and solve problems in biology and medicine in order to enhance health care. Students involved in biomedical engineering learn to work with living systems and to apply advanced technology to the complex problems of medical care. Biomedical engineers work with other health care professionals including physicians, nurses, therapists and technicians toward improvements in diagnostic, therapeutic and health delivery systems. Biomedical engineers may be involved with designing medical instruments and devices, developing medical software, tissue and cellular engineering, developing new procedures or conducting state-of-the-art research needed to solve clinical problems.

There are numerous areas of specialization and course work within biomedical engineering. These include:

1. Bioinstrumentation: the application of electronics and measurement techniques to develop devices used in the diagnosis and treatment of disease, including heart monitors, intensive care equipment, cardiac pacemakers and many other electronic devices.
2. Biomaterials: the development of artificial and living materials used for implantation in the human body, including those used for artificial heart valves, kidney dialysis cartridges, and artificial arteries, hips and knees.
3. Biomechanics: the study of motion, forces and deformations in the human body, including the study of blood flow and arterial disease, forces associated with broken bones and their associated repair mechanisms, mechanisms of blunt trauma including head injuries, orthopedic systems, and the forces and movement associated with human joints such as the knee and hip.
4. Tissue and cellular engineering: the application of biochemistry, biophysics and biotechnology toward the development of new cellular and tissue systems and an understanding of disease processes, including development of artificial skin and organs, cell adherence to artificial materials to prevent rejection by the body, and the development of new genetic cellular systems to treat diseases.

5. Medical imaging: the development of devices and systems to image the human body to diagnose diseases, including the development and data processing of the CAT scan, MRI (magnetic resonance imaging), medical ultrasound, X-ray and PET (positron emission tomography).

6. Rehabilitation engineering: the development of devices and prosthetics to enhance the capabilities of disabled individuals, including design of wheelchairs, walkers, artificial legs and arms, enhanced communication aids, and educational tools for the handicapped.

A unique aspect to the undergraduate biomedical engineering is the practicum series, EGRB 101 and 301, which involves biomedical engineering students participating in medical rounds at the VCU Medical Center’s MCV Hospitals, in medical research laboratories throughout the medical center and the Virginia BioTechnology Research Park, and in medical seminars, case studies and medical laboratories. This unique opportunity is the only one of its kind in the nation and involves the cooperation of the VCU Medical Center, one of the nation’s largest and most prestigious medical centers.

**Biomedical engineering curriculum**

<table>
<thead>
<tr>
<th>Technical elective tracks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General education requirements</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Biomedical engineering curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshman year, fall semester</strong></td>
</tr>
<tr>
<td>BIOL 152 Introduction to Biological Science II</td>
</tr>
<tr>
<td>CHEM 101 General Chemistry</td>
</tr>
<tr>
<td>CHEZ 101 General Chemistry Laboratory I</td>
</tr>
<tr>
<td>EGRB 101 Biomedical Engineering Practicum I</td>
</tr>
<tr>
<td>MATH 200 Calculus with Analytic Geometry</td>
</tr>
<tr>
<td>UNIV 111 Focused Inquiry I</td>
</tr>
<tr>
<td><strong>Freshman year, spring semester</strong></td>
</tr>
<tr>
<td>CHEM 102 General Chemistry</td>
</tr>
<tr>
<td>CHEZ 102 General Chemistry Laboratory II</td>
</tr>
<tr>
<td>EGRB 102 Introduction to Engineering</td>
</tr>
<tr>
<td>MATH 201 Calculus with Analytic Geometry</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry II</td>
</tr>
<tr>
<td><strong>Sophomore year, fall semester</strong></td>
</tr>
<tr>
<td>EGRE 206 Electric Circuits</td>
</tr>
<tr>
<td>MATH 301 Differential Equations</td>
</tr>
<tr>
<td>PHIS 309 Introductory Quantitative Physiology I</td>
</tr>
<tr>
<td>PHYS 207 University Physics I</td>
</tr>
<tr>
<td><strong>Sophomore year, spring semester</strong></td>
</tr>
<tr>
<td>EGRB 203 Introduction to Biomechanics</td>
</tr>
<tr>
<td>EGRB 215 Computational Methods</td>
</tr>
<tr>
<td>MATH 310 Linear Algebra</td>
</tr>
<tr>
<td>PHIS 310 Introductory Quantitative Physiology II</td>
</tr>
<tr>
<td>PHYS 208 University Physics II</td>
</tr>
<tr>
<td><strong>Junior year, fall semester</strong></td>
</tr>
<tr>
<td>EGRB 307 Biomedical Instrumentation</td>
</tr>
<tr>
<td>EGRB 310 Biomechanics</td>
</tr>
<tr>
<td>EGRB 427 Biomaterials</td>
</tr>
<tr>
<td>PHIL 213 Ethics and Health Care</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric Workshop (or other university core research and academic writing course)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
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<tbody>
<tr>
<td>16</td>
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<tr>
<td>14</td>
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<tr>
<td>16</td>
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<tr>
<td>18</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Technical elective tracks</strong></th>
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</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Pre-medical track</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 151 Introduction to Biological Science I</td>
</tr>
<tr>
<td>BIOZ 151 Introduction to Biological Science Laboratory I</td>
</tr>
<tr>
<td>BIOZ 152 Introduction to Biological Science Laboratory II</td>
</tr>
<tr>
<td>BIOL elective</td>
</tr>
<tr>
<td>CHEM 301 Organic Chemistry</td>
</tr>
<tr>
<td>CHEZ 301 Organic Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM 302 Organic Chemistry</td>
</tr>
<tr>
<td>CHEZ 302 Organic Chemistry Laboratory II</td>
</tr>
<tr>
<td>EGRB 403 Tissue Engineering</td>
</tr>
<tr>
<td><strong>Biomechanics and biomaterials track</strong></td>
</tr>
<tr>
<td>BIOL 218 Cell Biology</td>
</tr>
<tr>
<td>EGRB 403 Tissue Engineering</td>
</tr>
<tr>
<td>EGRB 405 Finite Element Analysis in Solid Mechanics</td>
</tr>
<tr>
<td>EGRB 406 Artificial Organs</td>
</tr>
<tr>
<td>EGRM 309 Materials Science for Engineers</td>
</tr>
<tr>
<td>EGRM 420 CAE Design</td>
</tr>
<tr>
<td>EGRM 421 CAE Analysis</td>
</tr>
<tr>
<td>ENGR 427 Robotics</td>
</tr>
<tr>
<td>ENGR 454 Automatic Controls</td>
</tr>
<tr>
<td><strong>Rehabilitation engineering track</strong></td>
</tr>
<tr>
<td>EGRB 405 Finite Element Analysis in Solid Mechanics</td>
</tr>
<tr>
<td>EGRB 406 Artificial Organs</td>
</tr>
<tr>
<td>EGRB 420 Rehabilitation Engineering</td>
</tr>
<tr>
<td>EGRB 421 Human Factors Engineering</td>
</tr>
<tr>
<td>EGRM 420 CAE Design</td>
</tr>
<tr>
<td>EGRM 421 CAE Analysis</td>
</tr>
<tr>
<td>ENGR 427 Robotics</td>
</tr>
<tr>
<td>MGMT 436 Technology and Management</td>
</tr>
<tr>
<td>PSYC 406 Perception</td>
</tr>
<tr>
<td><strong>Instrumentation and electronics track</strong></td>
</tr>
<tr>
<td>EGRB 407 Physical Principles of Biomedical Imaging</td>
</tr>
<tr>
<td>EGRB 408 Advanced Biomedical Signal Processing</td>
</tr>
<tr>
<td>EGRB 409 Microcomputer Applications in Biomedical Engineering</td>
</tr>
<tr>
<td>EGRE 224 Introduction to Microelectronics</td>
</tr>
<tr>
<td>EGRE 254 Digital Logic Design</td>
</tr>
<tr>
<td>EGRE 303 Electronic Devices</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total minimum requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>130</td>
</tr>
</tbody>
</table>

Undergraduate Bulletin 2012-13
The department offers a Bachelor of Science in Chemical and Life Science Engineering, and includes a chemical engineering track and a life science engineering track. Each student must choose the desired track upon initial registration. Details on curriculum and electives are provided on the individual track pages.

### Department D grade policy

Students must receive a grade of C in all engineering courses in order to graduate. Grades of C or better in the two introductory courses, CLSE 201 and CLSE 202, are required before students may take additional CLSE courses. However, after the two introductory courses, students are allowed to continue with one D grade in any CLSE course. They must retake that course in order to graduate, but may continue taking other CLSE courses. Students are not allowed to continue with two grades of D in CLSE courses before retaking at least one of those courses with a grade of C or better.

### Chemical engineering track

Chemical engineering involves the development and production of chemicals for applications of broad use to mankind. Chemical engineers work with and produce complex polymers and nanostructured materials, organic and inorganic compounds, semiconductor component materials, fuel cells, and a variety of specialty chemicals. Chemical engineers can be found in almost any engineering endeavor, as the role of chemistry and chemical physics rarely can be neglected in any science or engineering application.

A variety of core chemical engineering courses, such as transport phenomena, reaction science and engineering, and mass and energy balances, represent key foundational elements that apply to both the chemical engineering and the life science engineering tracks.

#### Technical electives

**General education requirements**

### Core curriculum

#### Fall semester, freshman year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEZ 101</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CLSE 101</td>
<td>Introduction to Chemical and Life Science Engineering</td>
<td>3</td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 200</td>
<td>Calculus with Analytic Geometry I</td>
<td>4</td>
</tr>
<tr>
<td>UNIV 111</td>
<td>Focused Inquiry I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 17 credits

#### Spring semester, freshman year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 102</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEZ 102</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>CLSE 102</td>
<td>Methods in CLSE</td>
<td>1</td>
</tr>
<tr>
<td>CLSE 115</td>
<td>Introduction to Programming for Chemical and Life Science Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MATH 201</td>
<td>Calculus with Analytic Geometry II</td>
<td>4</td>
</tr>
<tr>
<td>UNIV 112</td>
<td>Focused Inquiry II</td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 15 credits

#### Fall semester, sophomore year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 301</td>
<td>Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEZ 301</td>
<td>Organic Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td>CLSE 201</td>
<td>Chemical Engineering Fundamentals I: Material Balances</td>
<td>4</td>
</tr>
<tr>
<td>MATH 301</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 207</td>
<td>University Physics I</td>
<td>5</td>
</tr>
</tbody>
</table>

Total: 17 credits

#### Spring semester, sophomore year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 302</td>
<td>Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEZ 302</td>
<td>Organic Chemistry Laboratory II</td>
<td>2</td>
</tr>
<tr>
<td>CLSE 202</td>
<td>Chemical Engineering Fundamentals II: Energy Balances</td>
<td>4</td>
</tr>
</tbody>
</table>

Total: 17 credits
MATH 307 Multivariate Calculus 4
PHYS 208 University Physics II 5

Fall semester, junior year
BIOL 152 Introduction to Biological Sciences II 3
CLSE 301 Transport Phenomena I 3
CLSE 305 Thermodynamics of Phase Equilibria and Chemical Reactions 3
UNIV 200 Writing and Rhetoric 3
Engineering technical elective 3

Spring semester, junior year
CLSE 302 Transport Phenomena II 3
CLSE 312 Chemical Reaction Engineering 3
CLSE 320 Instrumentation Laboratory 2
CLSE 409 Chemical Process Control 3
ECON 205 The Economics of Product Development and Markets 3

Fall semester, senior year
CLSE 440 Unit Operations Laboratory 2
ENGR 402 Senior Design Studio I 1
ENGR 402 Senior Design Studio I Laboratory 2
ENGR 410 Review of Internship 1
STAT 541 Applied Statistics for Engineers and Scientists 3
PHIL 201 Critical Thinking About Moral Problems 3
Technical electives 3

Spring semester, senior year
ENGR 403 Senior Design Studio II 1
ENGR 403 Senior Design Studio II Laboratory 2
Engineering technical electives 6
General education requirement – social/behavioral science 3
Technical elective 3

Total minimum requirement 126

Technical electives: Three engineering technical electives must be 300-level or higher engineering courses; the remaining technical electives may be chosen from 300-level or higher courses from engineering, math, sciences or business. Suggested courses are listed below. Two of the technical electives must be chosen from the list of life science technical electives. Note: Some life science technical electives have prerequisites not included in the required courses above for the chemical engineering track. Students are strongly encouraged to take UNIV 200 during the fall semester of the junior year to prepare for writing assignments in upper-level engineering courses. All electives must be selected with the agreement of the student’s academic adviser.

Total credits: All chemical and life science engineering majors must complete a minimum of 126 credit hours in order to graduate. A minimum grade of C is required in all School of Engineering courses. Also, students should refer to the D grade policy.

Technical electives
Some courses may have prerequisites.

Chemical engineering
CHEM 303 Physical Chemistry
CHEM 580 Mechanical Properties of Plastics and Polymers
EGRC/CHM 306 Industrial Applications of Inorganic Chemistry
EGRC 325 Bioengineering
EGRC 350 Research in Chemical Engineering
EGRC 405 Process Synthesis

EGRC 428 Introduction to Polymer Science and Engineering
EGRC 549 Process Biotechnology
ENGR 305 Sensors and Measurements
ENGR 412 Advanced Engineering Mathematics
ENGR 430 Process Modeling and Simulation
ENGR 505 Characterization of Materials
EGRC 543 Advanced Reaction Engineering

Biosciences and biotechnology
BIOC 503-504 Biochemistry, Cell and Molecular Biology
BIOC 505, 506 Experimental Biochemistry
BIOL 151 Introduction to Biological Sciences I
BIOL 218 Cell Biology
CHEM/MEDC 310 Medicinal Chemistry and Drug Design
CHEM 327 Biochemistry
CHEM 403 Biochemistry I
CHEM 404 Biochemistry II
PHIS 206 Human Physiology

Biomedical engineering
EGRB 307 Biomedical Instrumentation
EGRB 310 Biomechanics
EGRB 406 Artificial Organs
EGRB 427 Biomaterials

Manufacturing
EGRM 425 Introduction to Manufacturing Systems
EGRM 426 Manufacturing Processes

Mathematics
MATH 310 Linear Algebra
MATH 310 OPER 327 Mathematical Modeling
MATH 515 Numerical Analysis I
MATH 516 Numerical Analysis II
MATH 533 Partial Differential Equations I

Polymer science and materials engineering
BIOC 602 Physical Properties of Macromolecules
CHEM 550 Introduction to Polymer Chemistry
CHEM 580 Mechanical Properties of Plastics and Polymers
CHEM 691 Topics in Chemistry

In addition, any ENGR 492 Special Topics course taught by faculty from the School of Engineering can be used as a technical elective by agreement with the student’s academic adviser, and with agreement from the department chair or assistant chair.

Core curriculum requirements
Chemical and life science engineering majors fulfill the Tier II core curriculum requirements via selection of courses in the topical areas as follows:

- Quantitative literacy: MATH 200
- Research and academic writing: UNIV 200
- Humanities/fine arts: PHIL 201
- Social/behavioral sciences: one course from approved Tier II list
- Natural/physical sciences: one course from approved Tier II list

Life science engineering track

As a discipline, life science engineering involves the application of engineering principles and practices to living organisms, including human beings. The increasing importance of life science subjects within the field of engineering cannot be underestimated. The living organism may be considered to be a small but highly complex engineering system. It consumes fuel and raw materials (oxygen, food and water), exchanges heat with its surroundings, pumps fluids and carries on numerous chemical reactions and separation processes. It has complex sensory, internal chemical signaling and control, and information storage and retrieval systems. It has diverse movement and chemical/mechanical work capabilities. Many of the principles and concepts developed in chemical engineering programs also are discussed in textbooks of cellular and vertebrate physiology (although usually in a more qualitative manner).

Technical electives
General education requirements
### Core curriculum

<table>
<thead>
<tr>
<th>Semester, Year</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall, Freshman Year</strong></td>
<td>CHEM 101</td>
<td>General Chemistry</td>
<td>3</td>
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<tr>
<td></td>
<td>CHEZ 101</td>
<td>General Chemistry Laboratory I</td>
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<td></td>
<td>CLSE 101</td>
<td>Introduction to Chemical and Life Science Engineering</td>
<td>3</td>
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<tr>
<td></td>
<td>MATH 200</td>
<td>Calculus with Analytic Geometry I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>UNIV 111</td>
<td>Focused Inquiry I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General education requirement – natural/physical science</td>
<td>3</td>
<td></td>
</tr>
<tr>
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<td><strong>Total</strong></td>
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</tr>
<tr>
<td><strong>Spring, Freshman Year</strong></td>
<td>CHEM 102</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
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<td></td>
<td>CHEZ 102</td>
<td>General Chemistry Laboratory II</td>
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<tr>
<td></td>
<td>CLSE 102</td>
<td>Methods in CLSE</td>
<td>1</td>
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<tr>
<td></td>
<td>CLSE 115</td>
<td>Introduction to Programming for Chemical and Life Science Engineering</td>
<td>3</td>
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<tr>
<td></td>
<td>MATH 201</td>
<td>Calculus with Analytic Geometry II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>UNIV 112</td>
<td>Focused Inquiry II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall, Sophomore Year</strong></td>
<td>CHEM 301</td>
<td>Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEZ 301</td>
<td>Organic Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CLSE 201</td>
<td>Chemical Engineering Fundamentals I: Material Balances</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 301</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHYS 207</td>
<td>University Physics I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Spring, Sophomore Year</strong></td>
<td>CHEM 302</td>
<td>Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEZ 302</td>
<td>Organic Chemistry Laboratory II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CLSE 202</td>
<td>Chemical Engineering Fundamentals II: Energy Balances and Engineering Thermodynamics</td>
<td>4</td>
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<tr>
<td></td>
<td>MATH 307</td>
<td>Multivariate Calculus</td>
<td>4</td>
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<tr>
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<td>PHYS 208</td>
<td>University Physics II</td>
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<td></td>
<td><strong>Total</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Fall, Junior Year</strong></td>
<td>BIOL 151</td>
<td>Introduction to Biological Science I*</td>
<td>3</td>
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<tr>
<td></td>
<td>CLSE 301</td>
<td>Transport Phenomena I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLSE 305</td>
<td>Thermodynamics of Phase Equilibria and Chemical Reactions</td>
<td>3</td>
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<tr>
<td></td>
<td>ECON 205</td>
<td>The Economics of Product Development and Markets</td>
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<tr>
<td></td>
<td>UNIV 200</td>
<td>Writing and Rhetoric</td>
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<td><strong>Total</strong></td>
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<tr>
<td><strong>Spring, Junior Year</strong></td>
<td>BIOL 152</td>
<td>Introduction to Biological Science II</td>
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<tr>
<td></td>
<td>BIOZ 152</td>
<td>Introduction to Biological Science Laboratory II</td>
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</tr>
<tr>
<td></td>
<td>CLSE 302</td>
<td>Transport Phenomena II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLSE 312</td>
<td>Chemical Reaction Engineering</td>
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</tr>
<tr>
<td></td>
<td>CLSE 320</td>
<td>Instrumentation Laboratory</td>
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</tr>
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<td>CLSE 409</td>
<td>Chemical Process Control</td>
<td>3</td>
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<tr>
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<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall, Senior Year</strong></td>
<td>CHEM 403</td>
<td>Biochemistry I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLSE 440</td>
<td>Unit Operations Laboratory</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>ENGR 402</td>
<td>Senior Design Studio I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ENGR 402</td>
<td>Senior Design Studio I Laboratory</td>
<td>2</td>
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<tr>
<td></td>
<td>ENGR 410</td>
<td>Review of Internship</td>
<td>1</td>
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<tr>
<td></td>
<td>PHIL 201</td>
<td>Critical Thinking about Moral Problems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>STAT 541</td>
<td>Applied Statistics for Engineers and Scientists</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### Total credits: 127

Technical electives: Suggested electives for the life sciences track include:

- ENGR 491 Special Topics in Engineering
- ENGR 492 Independent Study in Engineering
- CHEM/PHYS 491 Special Topics in Chemistry
- CHEM/PHYS 492 Independent Study in Chemistry

### Technical electives

- Biochemistry and biotechnology
  - BIOL 151 Introduction to Biological Science I*
  - BIOL 152 Introduction to Biological Science II
  - BIOZ 152 Introduction to Biological Science Laboratory II
- Chemical and life science engineering, minor in
  - CHEM 403 Biochemistry I
  - CLSE 440 Unit Operations Laboratory
  - ENGR 402 Senior Design Studio I
  - ENGR 402 Senior Design Studio I Laboratory
  - ENGR 410 Review of Internship
  - PHIL 201 Critical Thinking about Moral Problems
  - STAT 541 Applied Statistics for Engineers and Scientists

The minor in chemical and life science engineering consists of 21 credits and must include completion of these courses: CLSE 201, CLSE 202, CLSE 204, CLSE 301, CLSE 302, CLSE 305 and CLSE 312.
The Department of Computer Science offers undergraduate and graduate programs. The Bachelor of Science in Computer Science is a rigorous, highly concentrated curriculum of computer science courses. It includes advanced study in several important areas of computer science and provides a strong foundation in this discipline. Every course is taught by full-time faculty members who also serve as advisers to both undergraduate and graduate students.

The master’s degree program emphasizes continuing self-development of individuals currently engaged in science-, technology- and engineering-related fields. It prepares persons who have completed undergraduate majors in these fields for entry into careers in areas that use computing technology. Both the theoretical and applied aspects of computer science are emphasized in this program. The program offers courses in a wide range of areas in computer science including artificial intelligence, theory of computation, computer architecture, software engineering, programming languages, database and computer graphics. These areas correspond to the research interests and specialization of the faculty in the computer science program. For the convenience of students with full time jobs, a full range of courses is offered both during the day and in the evening.

The Computer Science Ph.D. in Engineering track is designed primarily for students who are interested in advanced research in areas related to software engineering, networking, parallel processing, databases, compiler theory, machine learning and artificial intelligence. Emphasis in this track is placed on foundational issues as well as contemporary research areas such as human-machine interface design, the design and development of intelligent control systems, optical networks, the applicability of modal logic operations in databases, and transformations permitting the development of trusted compilers.

### Administration

Krystof J. Cios  
Professor and Chair  
www.egr.vcu.edu/cs

### Computer science courses

Descriptions for all courses offered by the university may be accessed through the online courses database at [www.pubapps.vcu.edu/veucourses](http://www.pubapps.vcu.edu/veucourses). You may search by unit, subject or keyword, as well as by degree level.

Follow this link to computer science (CMSC) courses.

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### Computer Science, Bachelor of Science (B.S.)

The Bachelor of Science in Computer Science is built on a rigorous, highly concentrated, accredited curriculum of computer science courses. The program provides a strong foundation in the discipline and includes advanced study in several important areas of computer science.

The degree requires a minimum of 120 credit hours and includes undergraduate requirements, general education requirements and computer science major requirements.

### Degree requirements

The degree curriculum requires a minimum of 45 credits in courses labeled CMSC. Computer science majors are required to complete all of the following computer science courses:

- **CMSC 101 Introduction to Computer Science**
- **CMSC 255 Introduction to Programming**
- **CMSC 256 Data Structures and Object Oriented Programming**
- **CMSC 302 Introduction to Discrete Structures**
- **CMSC 311 Computer Organization**
- **CMSC 312 Introduction to Operating Systems**
- **CMSC 355 Program Design and Implementation Practicum**
- **CMSC 401 Algorithm Analysis with Advanced Data Structures**
- **CMSC 403 Programming Languages**
- **CMSC 451-452 Senior Project**

In order to provide breadth and depth of knowledge, an additional 9 credits in upper-level computer science courses must be completed. No more than two of CMSC 420, 519 or 525 may count toward these 9 credits.

### General education requirements

The general education requirements for computer science majors are as follows.

**Tier I:** UNIV 111 and UNIV 112

**Tier II:**
- Quantitative literacy: MATH 200-201, MATH 211 and STAT 212; complete one other course from MATH 301, MATH 310 or MATH 351.
- Research and academic writing: UNIV 200 or other research and academic writing course.
- Humanities, fine arts and social/behavioral sciences:
  - Humanities/fine arts: Select one course from the university approved list.
  - Social/behavioral science: Select one course from the university approved list
  - ECON 205 The Economics of Product Development and Markets
  - Humanities electives: nine additional credits in the humanities, fine arts and social sciences from among the following programs: African American studies, American studies, anthropology, School of the Arts, English, foreign language, history, philosophy, psychology, religious studies, social work, sociology and urban studies. Some courses in other programs (including most honors modules and other courses that focus on human behavior, communication and/or social interaction) may be counted toward this requirement with departmental approval.
- Natural/physical sciences:
  - One science course from the university approved list.
  - Chemistry, physics, or biology sequence: CHEM 101-102 and CHEZ 101-102, PHYS 207 and PHYS 208, or BIOL 151 and 152 and BIOZ 151 and 152.
- Two additional 3-credit (or more) courses in biology, chemistry or physics that count toward that major.

**Tier III:** CMSC 451-452

### Curriculum for computer science

#### Freshman year, fall semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 101</td>
<td>Introduction to Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 111</td>
<td>Focused Inquiry I</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>electives</td>
<td>6</td>
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<tr>
<td>Natural/physical science from list</td>
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#### Freshman year, spring semester

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<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 255</td>
<td>Introduction to Programming</td>
<td>4</td>
</tr>
<tr>
<td>ECON 205</td>
<td>The Economics of Product Development and Markets</td>
<td>3</td>
</tr>
<tr>
<td>MATH 211</td>
<td>Mathematical Structures</td>
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</tr>
<tr>
<td>UNIV 112</td>
<td>Focused Inquiry II</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>elective</td>
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<td></td>
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<td>16</td>
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</table>

#### Sophomore year, fall semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CMSC 256</td>
<td>Data Structures and Object Oriented Programming</td>
<td>3</td>
</tr>
<tr>
<td>CMSC 302</td>
<td>Introduction to Discrete Structures</td>
<td>3</td>
</tr>
<tr>
<td>MATH 200</td>
<td>Calculus with Analytic Geometry</td>
<td>4</td>
</tr>
<tr>
<td>Humanities/</td>
<td>fine arts from list</td>
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</tr>
<tr>
<td>Tier II research and academic writing course</td>
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#### Sophomore year, spring semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 303</td>
<td>Introduction to the Theory of Computation</td>
<td>3</td>
</tr>
<tr>
<td>CMSC 311</td>
<td>Computer Organization</td>
<td>3</td>
</tr>
<tr>
<td>MATH 201</td>
<td>Calculus with Analytic Geometry</td>
<td>4</td>
</tr>
<tr>
<td>STAT 212</td>
<td>Concepts of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Social/behavioral science from list</td>
<td>3</td>
<td></td>
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<tr>
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<td>Total</td>
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#### Junior year, fall semester

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CHEM and CHEZ 101</td>
<td>General Chemistry and Laboratory I</td>
<td>4 or 5</td>
</tr>
<tr>
<td>PHYS 207</td>
<td>University Physics or BIOL and BIOZ 151</td>
<td></td>
</tr>
<tr>
<td>Introduction to Biological Science and Laboratory I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMSC 312</td>
<td>Introduction to Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CMSC 355</td>
<td>Program Design</td>
<td>3</td>
</tr>
<tr>
<td>Natural science elective</td>
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<tr>
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<td>Total</td>
<td>13 or 14</td>
</tr>
</tbody>
</table>

---
## Accelerated Bachelor of Science (B.S.) and Master of Science (M.S.) in Computer Science

Students accepted into this selective program accomplish both the B.S. and M.S. degrees within five years by taking additional computer science courses within the first four years of the program. Some of these courses will replace general electives in the B.S. program.

### Program administration and minimum requirements

In order to be accepted students must:

1. Apply to the Computer Science Graduate Committee during the first semester after they have completed the last of the following sequence of classes: CMSC 101, 255, 256, 302, 303 and 311. Transfer students who enter with all of these courses (or equivalents) must apply during their first semester at VCU.
2. Have a minimum GPA of 3.4 based on CMSC 101, 255, 256, 302, 303 and 311; all grades in any repeated courses will be included in computing this GPA. Students transferring these courses into the program will have the grades from their previous institution included in computing this GPA only for purposes of determining eligibility for this program.
3. Have a minimum overall GPA of 3.0.

### Minimum requirements for accepted students to fulfill the program

Students accepted into the accelerated B.S. to M.S. program are not required to complete the GRE for admission to the M.S. portion of the program.

### Computer science, minor in

The minor in computer science consists of at least 18 credits in computer science including CMSC 255 and 256*, and nine upper-level credits. A minimum GPA of 2.0 must be achieved in the minor.

*Note that MATH 211 is a prerequisite for CMSC 256.

### Department of Electrical and Computer Engineering

The Department of Electrical and Computer Engineering prepares students for highly competitive, national placement in electrical and computer engineering employment and graduate education by providing a thorough grounding in electrical science and design, together with a sound foundation in mathematics, basic sciences and life skills.

The department offers baccalaureate degrees in computer engineering and electrical engineering, in addition to minors in both areas, as well as the option to choose courses work appropriate for a pre-medicine or pre-dentistry curriculum. An electrical and computer engineering track is available in the Master of Science in Engineering as well as the Ph.D. in Engineering. The track is designed to prepare students for practice, research and/or teaching of electrical and computer engineering at the advanced level by providing intensive preparation for professional practice in the microelectronics, nanoelectronics, computer engineering and controls and communications aspects of electrical and computer engineering. At the advanced level, this track prepares individuals to perform original, leading edge research in the broad areas of microelectronics, nanoelectronics, controls and communications and computer engineering.

<table>
<thead>
<tr>
<th>Junior year, spring semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM and CHEZ 102 General Chemistry and Laboratory I or PHYS 208 University Physics or BIOL and BIOZ 152</td>
</tr>
<tr>
<td>Introduction to Biological Science and Laboratory II</td>
</tr>
<tr>
<td>CMSC 401 Algorithm Analysis with Advanced Data Structures</td>
</tr>
<tr>
<td>CMSC 403 Programming Languages</td>
</tr>
<tr>
<td>Mathematics elective</td>
</tr>
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<td>Total credits: 13 or 14</td>
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</table>

<table>
<thead>
<tr>
<th>Senior year, fall semester</th>
</tr>
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<tbody>
<tr>
<td>CMSC 451 Senior Project</td>
</tr>
<tr>
<td>CMSC upper-level electives</td>
</tr>
<tr>
<td>General electives</td>
</tr>
<tr>
<td>Natural science elective</td>
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<td>Total credits: 14 to 16</td>
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</table>

### Accelerated Bachelor of Science (B.S.) and Master of Science (M.S.) in Computer Science

Students accepted into this selective program accomplish both the B.S. and M.S. degrees within five years by taking additional computer science courses within the first four years of the program. Some of these courses will replace general electives in the B.S. program.

### Program administration and minimum requirements

In order to be accepted students must:

1. Apply to the Computer Science Graduate Committee during the first semester after they have completed the last of the following sequence of classes: CMSC 101, 255, 256, 302, 303 and 311. Transfer students who enter with all of these courses (or equivalents) must apply during their first semester at VCU.
2. Have a minimum GPA of 3.4 based on CMSC 101, 255, 256, 302, 303 and 311; all grades in any repeated courses will be included in computing this GPA. Students transferring these courses into the program will have the grades from their previous institution included in computing this GPA only for purposes of determining eligibility for this program.
3. Have a minimum overall GPA of 3.0.

### Minimum requirements for accepted students to fulfill the program

Students accepted into the accelerated B.S. to M.S. program are not required to complete the GRE for admission to the M.S. portion of the program.

### Computer science, minor in

The minor in computer science consists of at least 18 credits in computer science including CMSC 255 and 256*, and nine upper-level credits. A minimum GPA of 2.0 must be achieved in the minor.

*Note that MATH 211 is a prerequisite for CMSC 256.

<table>
<thead>
<tr>
<th>Senior year, spring semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 452 Senior Project</td>
</tr>
<tr>
<td>CMSC upper-level elective</td>
</tr>
<tr>
<td>General electives</td>
</tr>
<tr>
<td>Total credits: 15</td>
</tr>
</tbody>
</table>

### Accelerated Bachelor of Science (B.S.) and Master of Science (M.S.) in Computer Science

Students accepted into this selective program accomplish both the B.S. and M.S. degrees within five years by taking additional computer science courses within the first four years of the program. Some of these courses will replace general electives in the B.S. program.

### Program administration and minimum requirements

In order to be accepted students must:

1. Apply to the Computer Science Graduate Committee during the first semester after they have completed the last of the following sequence of classes: CMSC 101, 255, 256, 302, 303 and 311. Transfer students who enter with all of these courses (or equivalents) must apply during their first semester at VCU.
2. Have a minimum GPA of 3.4 based on CMSC 101, 255, 256, 302, 303 and 311; all grades in any repeated courses will be included in computing this GPA. Students transferring these courses into the program will have the grades from their previous institution included in computing this GPA only for purposes of determining eligibility for this program.
3. Have a minimum overall GPA of 3.0.

### Minimum requirements for accepted students to fulfill the program

Students accepted into the accelerated B.S. to M.S. program are not required to complete the GRE for admission to the M.S. portion of the program.

### Computer science, minor in

The minor in computer science consists of at least 18 credits in computer science including CMSC 255 and 256*, and nine upper-level credits. A minimum GPA of 2.0 must be achieved in the minor.

*Note that MATH 211 is a prerequisite for CMSC 256.

<table>
<thead>
<tr>
<th>Senior year, spring semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 452 Senior Project</td>
</tr>
<tr>
<td>CMSC upper-level elective</td>
</tr>
<tr>
<td>General electives</td>
</tr>
<tr>
<td>Total credits: 15</td>
</tr>
</tbody>
</table>

### Accelerated Bachelor of Science (B.S.) and Master of Science (M.S.) in Computer Science

Students accepted into this selective program accomplish both the B.S. and M.S. degrees within five years by taking additional computer science courses within the first four years of the program. Some of these courses will replace general electives in the B.S. program.

### Program administration and minimum requirements

In order to be accepted students must:

1. Apply to the Computer Science Graduate Committee during the first semester after they have completed the last of the following sequence of classes: CMSC 101, 255, 256, 302, 303 and 311. Transfer students who enter with all of these courses (or equivalents) must apply during their first semester at VCU.
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3. Have a minimum overall GPA of 3.0.

### Minimum requirements for accepted students to fulfill the program

Students accepted into the accelerated B.S. to M.S. program are not required to complete the GRE for admission to the M.S. portion of the program.

### Computer science, minor in

The minor in computer science consists of at least 18 credits in computer science including CMSC 255 and 256*, and nine upper-level credits. A minimum GPA of 2.0 must be achieved in the minor.

*Note that MATH 211 is a prerequisite for CMSC 256.
The curricula of the department provide a strong foundation in the fundamentals of the profession, including engineering problem solving, breadth in the major facets of the profession and the opportunity to specialize in today’s critical areas of computer engineering, communication systems and microelectronics. Graduates will be well prepared for constant technological change and growth through lifelong learning.

Administration
Ashok Iyer
Professor and Department Chair
www.egr.vcu.edu/ece.aspx

Electrical and computer engineering courses
Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to electrical and computer engineering (EGRE) courses.
Follow these links to general engineering (ENGR) courses or the (ENGZ) laboratory.

Computer Engineering, Bachelor of Science (B.S.)

Computer engineers are responsible for developing the powerful computer systems that have become a part of our everyday life. Applications for computer engineering span the spectrum from high performance general purpose computing systems such as desktop workstations used in all facets of business, to small microprocessors embedded in larger systems and functioning as controllers. These latter applications, known as embedded systems, can be found in control systems for trains, aircraft and automobiles; medical equipment; telecommunications systems; and consumer electronics and appliances. This explosive growth of computer systems in use in almost every new appliance or vehicle has resulted in a strong demand for engineers trained in the development of these systems, and all indications are that this trend will continue for the foreseeable future.

Program D grade policy
Students must receive a minimum grade of C in all engineering, computer science, physics, mathematics and all technical electives to graduate.

Core curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
</table>

**Fall semester, freshman year**
CHEM 101 General Chemistry                                                                 3
CHEZ 101 General Chemistry Laboratory I                                                 1
EGRE 101 Introduction to Engineering                                                   3
MATH 200 Calculus with Analytic Geometry I                                              4
UNIV 111 Focused Inquiry I                                                               3

14

**Spring semester, freshman year**
EGRE 245 Engineering Programming Using C                                                3
MATH 201 Calculus with Analytic Geometry II                                              4
PHYS 207 University Physics I                                                           5
UNIV 112 Focused Inquiry II                                                               3

15

**Fall semester, sophomore year**
EGRE 206 Electric Circuits                                                             4
EGRE 246 Advanced Engineering Programming Using C++                                     3
MATH 301 Differential Equations                                                        3
PHYS 208 University Physics II                                                          5
Tier II research and academic writing course**                                          3

18

**Spring semester, sophomore year**
EGRE 207 Advanced Circuit Design                                                       4
EGRE 254 Digital Logic Design                                                           3

EGRE 335 Signals and Systems I                                                          4
MATH 211 Mathematical Structures                                                        3
Humanities elective**                                                                   3

17

**Fall semester, junior year**
CMSC 355 Program Design and Implementation Practicum                                     3
EGRE 224 Introduction to Microelectronics                                              4
EGRE 337 Signals and Systems II                                                         3
EGRE 364 Microcomputer Systems                                                          4
EGRE 365 Digital Systems                                                                3

17

**Spring semester, junior year**
CMSC 312 Introduction to Operating Systems                                              3
CMSC 420 Software Engineering Practicum                                                  3
ECON 205 The Economics of Product Development and Markets                               3
Social science elective**                                                                3
Technical elective^                                                                     3

15

**Fall semester, senior year**
EGRE 426 Computer Organization and Design                                               3
ENGR 402 Senior Design Studio I                                                          1
SPCH 321 Speech for Business and the Professions or MGMT                                 3
325 Organizational Communications                                                        3
Science elective**                                                                     3
Technical electives^                                                                   7

17

**Spring semester, senior year**
CMSC 427 Advanced Digital Design                                                        4
ENGR 403 Senior Design Studio II                                                         1
Ethics elective***                                                                     3
Free elective^                                                                         3
Technical electives^                                                                   6

17

**Total credits** 130

* UNIV 200 or other research and academic writing course
** From university-approved core lists
*** PHIL 201 or RELS 340
^ Refer to departmental lists for approved technical electives
^ By careful choice of free and technical electives, students could obtain minors in mathematics, physics, computer science, business or other disciplines.

Technical electives (16 credits) and Capstone Project (4 credits)

Of the 16 credit hours existing in the junior and senior year, each student must choose courses such that satisfy the following criteria:

- Courses must be at the 300-level or above
- At least nine credit hours must come from the following areas (excluding CMSC 311):
  - EGRE
  - CMSC
- At least three credit hours must come from the following areas:
  - MATH
  - PHYS
  - CLSE
  - EGRB
  - EGRN
Exceptions to the above rules must be approved by the adviser and department chair.

Program options

Students in the electrical or computer engineering program concentrations may elect a pre-medicine or pre-dentistry option. This option may, however, require more than 130 credit hours in order to fulfill the requirements for both the baccalaureate degree in electrical engineering and those of the option listed below.

Pre-medicine/dentistry

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOD 151 and 152 Introduction to Biological Science</td>
<td>3, 3</td>
</tr>
<tr>
<td>BIOZ 151 and 152 Introduction to Biological Science</td>
<td>1, 1</td>
</tr>
<tr>
<td>BIOL 218 Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 102 General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEZ 102 General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 301-302 Organic Chemistry</td>
<td>3-3</td>
</tr>
<tr>
<td>CHEZ 301 Organic Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td>P HIS 206 Human Physiology</td>
<td>3</td>
</tr>
</tbody>
</table>

Computer engineering, minor in

The minor in computer engineering consists of completing the following courses (20 credits): CMSC 245 or 256, EGRE 254, EGRE 364 or CMSC 311; EGRE 365, 426 and 427.

Electrical Engineering, Bachelor of Science (B.S.)

The profession of electrical engineering touches all aspects of our lives in that electrical engineers design and fabricate devices and systems critical in applications such as computing, communications, health care, manufacturing and automation, power generation and utilization, transportation, and entertainment. An element very important to these and many other applications is the microelectronic device or system.

In the sub-area of microelectronics, electrical engineers design and fabricate electronic materials such as semiconductors, conductors and superconductors used in the manufacture of electronic devices. As a natural progression, electrical engineers design and fabricate electronic devices such as transistors, which control or modulate the flow of energy; sensors of light, mechanical force, chemicals, etc.; electromagnetic radiation sources such as lasers, light emitting diodes and microwave power sources. Following this progression, we find electrical engineers designing and fabricating integrated circuits such as microprocessors and memory elements; flat-panel displays, etc., which are found in applications ranging from supercomputers to watches, clocks and toys. Further in this progression we find electrical engineers designing and fabricating today’s and tomorrow’s computers.

Computer systems and application-specific integrated circuits are the elements that enable the existence of today’s communication systems, such as the Internet, satellite systems, telemedicine, wired and wireless (cellular) telephones, along with standard and high definition television. Additionally, along with sensors, microwave power sources and actuators, they permit our present and future automated manufacturing lines, air and traffic control systems, and automotive safety and traffic control through collision avoidance radar systems, antilocking brake systems, air bag actuators, automatic traffic routing and the “smart highway” of the future.

Electrical engineers play an ever increasing role in the design and building of major facets of today’s and tomorrow’s health care systems and medical research through the application of microelectronic instrumentation and diagnostic tools such as MRI and CAT scan systems. The field of electrical engineering truly permeates every facet of our lives and thus provides excellent employment opportunities to the general practitioner or specialist in more than 35 different subspecialties.

Program D grade policy

Students must receive a minimum grade of C in all engineering, computer science, physics, mathematics and all technical electives to graduate.

Core curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall, freshman year</td>
<td>CHEM 101 General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEZ 101 General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>EGRE 101 Introduction to Engineering</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 200 Calculus with Analytic Geometry I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>UNIV 111 Focused Inquiry I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Spring, freshman year</td>
<td>EGRE 245 Engineering Programming Using C</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 201 Calculus with Analytic Geometry II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHYS 207 University Physics I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>UNIV 112 Focused Inquiry II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Fall, sophomore year</td>
<td>EGRE 206 Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EGRE 246 Advanced Programming Using C++</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 301 Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHYS 208 University Physics II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Tier II research and academic writing course*</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Spring, sophomore year</td>
<td>EGRE 207 Advanced Circuit Design</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EGRE 254 Digital Logic Design</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EGRE 335 Signals and Systems I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 307 Multivariate Calculus</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Humanities elective**</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Fall, junior year</td>
<td>EGRE 224 Introduction to Microelectronics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EGRE 309 Electromagnetic Fields</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EGRE 337 Signals and Systems II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EGRE 364 Microcomputer Systems</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Technical elective^</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Spring, junior year</td>
<td>ECON 205 The Economics of Product Development and Markets</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EGRE 303 Electronic Devices</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EGRE 336 Introduction to Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social science elective**</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Technical elective^</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Fall, senior year</td>
<td>ENGR 402 Senior Design Studio</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>SPCH 321 Speech for Business and the Professions</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Science elective**</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Technical electives^</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Spring, senior year</td>
<td>ENGR 403 Senior Design Studio</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Ethics elective**</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Free elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Technical electives^</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Total credits</td>
<td></td>
<td>130</td>
</tr>
</tbody>
</table>
Courses must be 300- or 400-level technical courses (not already listed in the curriculum requirements).

Microelectronic fabrication emphasis (19 credits): EGRE 206, 224, 303, 435; EGRE 436 Advanced Microscale and Nanoscale Fabrication.

Control emphasis (19 credits): EGRE 206, 224, 335 and 454; ENGR 315.

At least 6 credits must come from one concentration area in electrical engineering.

At least one course in the electrical engineering concentration area must have an associated laboratory.

At least 3 credit hours must come from a second (i.e., different) electrical engineering concentration area.

At least 3 credit hours from outside of the electrical engineering subject (i.e., non-EGRE courses).

Non-EGRE courses that are listed as EGRE concentration area courses can be used either for the concentration area or as non-EGRE courses, but not both.

Refer to departmental lists for approved technical electives. Courses not from the department lists must be approved by the adviser and department chair.

Technical electives (21 credits)

Program options

Students in the electrical or computer engineering program concentrations may elect one of the following programs/options. These options may, however, require more than 130 credit hours in order to fulfill the requirements for both the baccalaureate degree in electrical engineering and those of the program/option listed below.

Pre-medicine/dentistry

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 151</td>
<td>Introduction to Biological Science</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Introduction to Biological Science Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 102</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEZ 102</td>
<td>General Chemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEZ 301</td>
<td>Organic Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>PHS 206</td>
<td>Human Physiology</td>
<td>3</td>
</tr>
</tbody>
</table>

Electrical engineering, minor in

A student may earn a minor in electrical engineering with an emphasis in communications, control, microelectronic fabrication or signal processing. Each emphasis has a required set of courses.

<table>
<thead>
<tr>
<th>Emphasis</th>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications</td>
<td>EGRE 206, 224, 335, 336 and 444</td>
<td>13</td>
</tr>
<tr>
<td>Control</td>
<td>EGRE 206, 224, 335 and 454; ENGR 315</td>
<td>13</td>
</tr>
<tr>
<td>Microelectronic</td>
<td>EGRE 206, 224, 335, 435, 436 and 453</td>
<td>15</td>
</tr>
<tr>
<td>Signal processing</td>
<td>EGRE 206, 224, 335, 337 and 445</td>
<td>15</td>
</tr>
</tbody>
</table>

Electrical engineering concentration areas

Communication systems

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGRB 408</td>
<td>Advanced Biomedical Signal Processing</td>
<td>3</td>
</tr>
<tr>
<td>EGRE 444</td>
<td>Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>EGRE 535</td>
<td>Digital Signal Processing</td>
<td>3</td>
</tr>
</tbody>
</table>

Computer engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGRE 426</td>
<td>Computer Organization and Design</td>
<td>3</td>
</tr>
<tr>
<td>EGRE 427</td>
<td>Advanced Digital Design</td>
<td>4</td>
</tr>
<tr>
<td>EGRE 533</td>
<td>VLSI Design</td>
<td>4</td>
</tr>
</tbody>
</table>

Controls engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGRE 455</td>
<td>Control Systems Design</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 410</td>
<td>Mechatronics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 315</td>
<td>Process and Systems Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 427</td>
<td>Robotics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 454</td>
<td>Automatic Controls</td>
<td>4</td>
</tr>
</tbody>
</table>

Microelectronics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGRE 310</td>
<td>Microwave and Photonics Engineering</td>
<td>3</td>
</tr>
<tr>
<td>EGRE 435</td>
<td>Microscale and Nanoscale Fabrication</td>
<td>4</td>
</tr>
<tr>
<td>EGRE 436</td>
<td>Advanced Microscale and Nanoscale Fabrication</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 334</td>
<td>Introduction to Microfabrication</td>
<td>4</td>
</tr>
</tbody>
</table>

Capstone Project (4 credits)

The Capstone Project requirement can be satisfied by successfully completing one of the following courses:

- EGRE 427 Advanced Digital Design
- EGRE 436 Advanced Microscale and Nanoscale Fabrication
- ENGR 402 and ENGR 403 Senior Design Studio I and II Laboratory.

Students choosing this option must have a project and project adviser (any electrical or computer engineering faculty member) chosen by the first week of the ENGR 402 class.

Note that the Capstone Project cannot be double counted as a technical elective.

Department of Mechanical and Nuclear Engineering

Mechanical engineering is one of the oldest and broadest engineering disciplines. Mechanical engineers design and analyze machines of all types including automobiles, airplanes, rockets, submarines, power generation systems, biomedical instrumentation, robots, manufacturing systems, household appliances and many, many more. In addition to well-known areas such as nuclear energy, nuclear propulsion and nuclear medicine, nuclear engineers are involved in many other applications of nuclear science and technology in fields as diverse as agriculture, industry, homeland security, forensics, environmental protection and even art. The Department of Mechanical and Nuclear Engineering provides quality graduate and undergraduate education through the following degree-granting programs:

- B.S. in Mechanical Engineering (general mechanical engineering curriculum)
- B.S. in Mechanical Engineering (nuclear engineering concentration)
- B.S. in Mechanical and Nuclear Engineering (thesis and non-thesis options)
- Ph.D. in Engineering (mechanical engineering track)

Current areas of research within the department include but are not limited to energy conversion systems, smart materials, corrosion, medical devices, aerosol science, sensors, radiation detection and measurement, nuclear reactor design, robotics, fluid mechanics, nanotechnology and biomechanics.

Administration

Gary Tepper
Professor and Interim Chair

www.egr.vcu.edu/me

Mechanical engineering courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to mechanical engineering (EGRM) courses.
Follow these links to general engineering (ENGR) courses or the (ENGZ) laboratory.

**Mechanical Engineering, Bachelor of Science (B.S.)**

Mechanical engineering is one of the oldest and broadest engineering disciplines. Mechanical engineers design and analyze machines of all types, including automobiles, airplanes, rockets, submarines, power generation systems, biomedical instrumentation, robots, manufacturing systems, household appliances and many, many more.

In addition, mechanical engineers design and analyze the energy sources that provide power to machines, fluids that interact with machines and the materials from which machines are constructed. Mechanical engineers also work in cutting-edge fields such as nanotechnology, alternative energy sources and environmentally friendly “green” manufacturing processes. Another important application of mechanical engineering is in medicine, where artificial organs, surgical tools and drug-delivery systems are vital to human well-being.

Mechanical engineers are in continuous demand by virtually all industries and are also employed by state and federal governments and enjoy one of the highest starting salaries of all college majors. Mechanical engineering graduates can, if they wish, continue their studies and obtain advanced degrees in fields such as business, law, medicine and engineering.

The VCU Department of Mechanical and Nuclear Engineering is the largest in the School of Engineering and offers a fully accredited B.S. degree in mechanical engineering, including the option of obtaining a major concentration nuclear engineering. The curriculum for the freshman year is the same with or without the nuclear concentration. A student may declare their intention to enter the nuclear concentration at any point during their undergraduate studies; however, most students will make this choice as they begin taking nuclear engineering courses in their sophomore year.

**Department grade policy**

In order to graduate, students must earn a minimum grade of C in all required engineering courses; in all courses used to satisfy technical elective requirements; and in MATH 200, MATH 201, MATH 301, MATH 307 and PHYS 207.

**Mechanical engineering curriculum**

<table>
<thead>
<tr>
<th><strong>Freshman year, fall semester</strong></th>
<th><strong>Credits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101 General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEZ 101 General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>EGRM 101 Introduction to Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MATH 200 Calculus with Analytic Geometry</td>
<td>4</td>
</tr>
<tr>
<td>UNIV 111 Focused Inquiry I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Freshman year, spring semester</strong></th>
<th><strong>Credits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>EGRM 215 Engineering Visualization and Computation</td>
<td>3</td>
</tr>
<tr>
<td>MATH 201 Calculus with Analytic Geometry</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 207 University Physics I</td>
<td>5</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry II</td>
<td>3</td>
</tr>
<tr>
<td>Social science elective (university core: social science)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Sophomore year, fall semester</strong></th>
<th><strong>Credits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>EGRM 309 Material Science for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 102 Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 301 Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 208 University Physics II</td>
<td>5</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric or other research and academic argument course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Sophomore year, spring semester</strong></th>
<th><strong>Credits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>EGRE 206 Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td>EGRM 201 Dynamics and Kinematics</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 202 Mechanics of Deformables</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 204 Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 307 Multivariate Calculus</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Junior year, fall semester</strong></th>
<th><strong>Credits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>EGRM 300 Mechanical Systems Design</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 311 Solid Mechanics Lab</td>
<td>1.5</td>
</tr>
<tr>
<td>EGRM 321 Numerical Methods</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 420 CAE Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 301 Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 541 Applied Statistics for Engineers and Scientists</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td><strong>16.5</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Junior year, spring semester</strong></th>
<th><strong>Credits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 205 The Economics of Product Development and Markets</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 303 Thermal Systems Design</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 312 Thermal Sciences Lab</td>
<td>1.5</td>
</tr>
<tr>
<td>EGRM 421 CAE Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 302 Heat Transfer</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 315 Process and Systems Dynamics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td><strong>16.5</strong></td>
</tr>
</tbody>
</table>

**Summer**

Students are required to complete an internship, typically during the summer between the junior and senior years. The internship is intended to have a major component of hands-on engineering practice and incorporate real-world engineering experience into the curriculum.

<table>
<thead>
<tr>
<th><strong>Senior year, fall semester</strong></th>
<th><strong>Credits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 410 Mechatronics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 402 Senior Design Studio</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 402 Senior Design Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 410 Review of Internship</td>
<td>1</td>
</tr>
<tr>
<td>PHIL 201 Critical Thinking About Moral Problems (university core: humanities)</td>
<td>3</td>
</tr>
<tr>
<td>Technical electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Senior year, spring semester</strong></th>
<th><strong>Credits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 403 Senior Design Studio</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 403 Senior Design Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 319 Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>Natural/physical science elective (university core: science)</td>
<td>3</td>
</tr>
<tr>
<td>Technical electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

| **Minimum total requirement** | **130** |

<table>
<thead>
<tr>
<th><strong>Technical electives</strong></th>
<th><strong>Credits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical engineering students must complete a total of 12 credit hours of technical electives (typically four courses). All technical electives must be approved in writing by the department chair. A list of preapproved courses is available in the department office. Students may count up to three credit hours toward the required 12 by selecting from the physics or business courses in the approved list. Note that some technical elective courses outside the department may have prerequisites that are not part of the required curriculum and are not accepted as technical electives. Special topics and independent study courses may be used as technical electives with prior written approval of the department chair.</td>
<td></td>
</tr>
</tbody>
</table>

**Mechanical engineering curriculum with nuclear engineering concentration**

<table>
<thead>
<tr>
<th><strong>Freshman year, fall semester</strong></th>
<th><strong>Credits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101 General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEZ 101 General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>EGRM 101 Introduction to Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MATH 200 Calculus with Analytic Geometry</td>
<td>4</td>
</tr>
<tr>
<td>UNIV 111 Focused Inquiry I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Sophomore year, fall semester</strong></th>
<th><strong>Credits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>EGRM 309 Material Science for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 102 Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 301 Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 208 University Physics II</td>
<td>5</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric or other research and academic argument course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Sophomore year, spring semester</strong></th>
<th><strong>Credits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>EGRE 206 Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td>EGRM 201 Dynamics and Kinematics</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 202 Mechanics of Deformables</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 204 Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 200 Calculus with Analytic Geometry</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>Course</td>
<td>Credits</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>Freshman year, spring semester</strong></td>
<td></td>
</tr>
<tr>
<td>EGRM 215 Engineering Visualization and Computation</td>
<td>3</td>
</tr>
<tr>
<td>MATH 201 Calculus with Analytic Geometry</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 207 University Physics I</td>
<td>5</td>
</tr>
<tr>
<td>UNIV 112 Focused Inquiry II</td>
<td>3</td>
</tr>
<tr>
<td>Social science elective (university core: social science)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Sophomore year, fall semester</strong></td>
<td></td>
</tr>
<tr>
<td>ENGR 210 Introduction to Nuclear Engineering</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 102 Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 301 Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 208 University Physics II</td>
<td>5</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric or other research and academic writing course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Sophomore year, spring semester</strong></td>
<td></td>
</tr>
<tr>
<td>EGRM 201 Dynamics and Kinematics</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 202 Mechanics of Deformables</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 204 Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>EGRN 310 Fundamentals of Nuclear Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MATH 307 Multivariate Calculus</td>
<td>4</td>
</tr>
<tr>
<td><strong>Junior year, fall semester</strong></td>
<td></td>
</tr>
<tr>
<td>EGRM 300 Mechanical Systems Design</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 311 Solid Mechanics Lab</td>
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</tr>
<tr>
<td>EGRM 321 Numerical Methods</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 420 CAE Design</td>
<td>3</td>
</tr>
<tr>
<td>EGRN 330 Radiation Safety and Shielding</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 301 Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Junior year, spring semester</strong></td>
<td></td>
</tr>
<tr>
<td>EGRE 206 Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td>EGRM 303 Thermal Systems Design</td>
<td>3</td>
</tr>
<tr>
<td>EGRM 312 Thermal Sciences Lab</td>
<td>1.5</td>
</tr>
<tr>
<td>EGRN 420 Nuclear Power Plants</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 302 Heat Transfer</td>
<td>3</td>
</tr>
<tr>
<td>Nuclear engineering elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Summer</strong></td>
<td></td>
</tr>
<tr>
<td>Students are required to complete an internship, typically during the summer between the junior and senior years. The internship is intended to have a major component of hands-on engineering practice and incorporate real-world engineering experience into the curriculum.</td>
<td></td>
</tr>
<tr>
<td><strong>Senior year, fall semester</strong></td>
<td></td>
</tr>
<tr>
<td>EGRM 309 Material Science for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>EGRN 320 Reactor Design and Systems</td>
<td>3</td>
</tr>
<tr>
<td>EGRN 410 Economics of Nuclear Power Production</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 402 Senior Design Studio</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 402 Senior Design Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 410 Review of Internship</td>
<td>1</td>
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<tr>
<td>PHIL 201 Critical Thinking About Moral Problems (university core: humanities)</td>
<td>3</td>
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<td><strong>Senior year, spring semester</strong></td>
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</tr>
<tr>
<td>ENGR 315 Process and Systems Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 403 Senior Design Studio</td>
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<td>ENGZ 403 Senior Design Laboratory</td>
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<td>3</td>
</tr>
<tr>
<td>Nuclear engineering elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Minimum total requirement** 130

**Nuclear engineering electives**

Mechanical engineering students completing the nuclear engineering concentration will choose one nuclear engineering elective course from the following list. A special topic, independent study or other course may be used as the nuclear engineering elective with prior written approval of the department chair.

- EGRM 545 Energy Conversion Systems
- EGRM 561 Advanced Fluid Mechanics
- EGRM 331 Nuclear Instrumentation and Measurement
- EGRM 440 Nuclear Safety and Security
- EGRM 450 Nuclear Reactor Control and Dynamics
- EGRM 510 Probabilistic Risk Assessment
- EGRM 530 System Analysis of the Nuclear Fuel Cycle

**Mechanical engineering, minor in**

The minor in mechanical engineering consists of 21 credits and successful completion of the following courses: EGRM 201 Dynamics and Kinematics, EGRM 202 Mechanics of Deformables, EGRM 204 Thermodynamics, EGRM 300 Mechanical Systems Design, ENGR 102 Engineering Statics, ENGR 301 Fluid Mechanics and ENGR 302 Heat Transfer. A maximum of nine credits of comparable course work may be substituted with approval of the chair of the mechanical engineering department.
The School of Medicine of the then Medical College of Virginia opened on November 5, 1838, as the medical department of Hampden-Sydney College. Full-time clinical faculty members were first appointed in 1928, and improved facilities became available between 1936 and 1941 with the completion of the 600-bed West Hospital, A. D. Williams Clinic and Hunton Hall dormitory, located on the current site of the Main Hospital building. Growth in faculty students and facilities continued after World War II, leading to the development of today’s academic health center.

Hospital facilities on the MCV Campus include both in-patient and out-patient facilities. MCV Hospitals of the VCU Health System is licensed for 902 beds. In addition, the hospital at the McGuire Veterans Affairs Medical Center (600 beds) provides excellent patient care, training and research opportunities for the School of Medicine through its affiliation programs.

In the School of Medicine, advanced degree programs are coordinated through the Office of the Associate Dean for Graduate Education, who acts for the dean on all issues related to administration of advanced degree programs. Each advanced-degree program is represented by a faculty member who serves as director for graduate programs. Directors are appointed either by the chair of the department offering graduate degrees or, in the case of interdisciplinary programs, by the dean in consultation with the chairs of participating departments. The directors of graduate programs act on behalf of the programs and hold the responsibility and authority to represent the respective department(s) and their faculty to the school.

**Administration**

1101 East Marshall Street
P.O. Box 980565
Richmond, Virginia 23298-0565
www.medschool.vcu.edu

Jerome F. Strauss III
Executive Vice-President for Medical Affairs (VCU Health System) and Dean

**Accreditation**

Genetic counseling (master’s degree)
American Board of Genetic Counseling

Medical physics
Commission on Accreditation of Medical Physics Educational Programs

Medicine (M.D.)
Liaison Committee on Medical Education

Public health (master’s degree)
Council on Education in Public Health

**Faculty and facilities**

The School of Medicine consists of 700 full-time faculty, including affiliates, assisted by 630 residents and fellows and more than 700 clinical voluntary faculty. Programs of instruction and research are conducted on campus, at the McGuire Veterans Affairs Medical Center and at affiliated hospitals in an effort to expose the students to the variety of clinical disorders encountered in the eastern U.S. The School of Medicine has established a geographically separate campus at the Inova Fairfax Hospital. Each year, 24 third-year students take all their clinical clerkships at Inova Fairfax Hospital. Their fourth year elective program also is based at the Inova Fairfax Hospital.
The School of Nursing originated in 1893 as part of the University College of Medicine. Since then, the educational program has evolved from a basic diploma program to multiple programs at the baccalaureate-, master’s- and doctoral-degree levels. Additionally, the School of Nursing offers post-master’s certificate programs. The School of Nursing takes pride in its long history of service to the profession of nursing and continues to be a leader in nursing education in Virginia.

Administration
1100 East Leigh Street
P.O. Box 980567
Richmond, Virginia 23298-0567
(804) 828-0724
Fax: (804) 828-7743
www.nursing.vcu.edu

Nancy F. Langston
Dean

Ann B. Haunric
Associate Dean of Academic Programs

Marie S. Gardner
Assistant Dean for Administration and Resources, Research Support

Susan L. Lipp
Assistant Dean for Enrollment and Student Services

Suzanne McGinnis
Director of Administrative and Academic Technology

James Parrish
Director of Development

Sandra Voll
Director of Clinical Learning Center

Accreditation
The baccalaureate and master’s degree programs in nursing, as well as the post-master’s certificate program, are accredited by the National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326. The undergraduate program is approved by the Virginia Board of Nursing, and graduates are eligible to take the NCLEX RN registered nurse licensing examination.

Programs
The School of Nursing offers Bachelor of Science, Master of Science, Post-Master’s Certificate and Doctor of Philosophy programs. Curricula and admissions information pertaining to all of these programs is available on this Web site and may be accessed using the Program search feature at the top of this page. Further information may be obtained by visiting the School of Nursing Web site at www.nursing.vcu.edu or by writing to Virginia Commonwealth University, School of Nursing, Office of Enrollment and Student Services, P.O. Box 980567, Richmond, VA 23298-0567.

Facilities and resources
The faculty and administrative offices of the school are housed at 1100 E. Leigh St. Additionally, this building has a nursing clinical resource laboratory, computer laboratory and classrooms equipped with a full range of audiovisual equipment. Both graduate and undergraduate courses are also scheduled in other classrooms on campus.

The clinical laboratories for nursing courses are conducted at the VCU Medical Center and in numerous other urban and rural hospitals and health agencies in the area, including community medical centers and state hospitals, public health services, private clinics and offices, and federal and state centers and departments. These facilities provide generalized and specialized inpatient and ambulatory services. Students are given a range of diverse experiences in hospital and community-oriented nursing. Selection of specific facilities for student experience is based upon curricular and advanced-practice certification requirements, the educational needs of the individual student and the services available.

School honors, scholarships and awards
Applications for financial assistance must be filed for all forms of financial assistance, including traineeships. A Free Application for Federal Student Aid may be obtained from the Office of Financial Aid, Virginia Commonwealth University, Richmond, VA 23298-0244. Limited financial assistance is available through traineeships and scholarships administered by the School of Nursing. An application for financial assistance from School of Nursing sources will be made available to applicants and enrolled students. The school form must be completed in addition to the FAFSA submitted to the Office of Financial Aid.

Departments
Department of Adult Health and Nursing Systems
D. Patricia Gray
Associate Professor and Department Chair

Department of Family and Community Health Nursing
Debra E. Lyon
Associate Professor and Department Chair

Nursing courses
Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level. Follow this link to nursing (NURS) courses.

Undergraduate information
Admission requirements
Applications for admission are welcome from men and women from any cultural or ethnic background who are interested in a career in professional nursing. Students are admitted as sophomores. High school seniors can be admitted to the VCU Honors College and will have guaranteed admission to the School of Nursing as sophomores if they are in good academic standing with the Honors College. Admission into the School of Nursing is competitive. Applicants should follow the university guidelines in the "Admission to the University" section of this bulletin. Minimum admission criteria require that an applicant must be eligible for readmission to or in good standing at the last college attended and have a minimum GPA of 2.5 based on a 4.0 scale. Grades lower than C in any of the required courses are not acceptable for transfer. Admission GPA is calculated on courses required for the School of Nursing. Applicants should submit SAT (verbal and math), ACT or GRE scores. All applicants to the undergraduate program must have a minimum of at least 900 combined critical reading and math on the SAT (with neither score below 400) or a comparable score on the ACT or GRE to be considered for admission to the program. Applicants are required to complete an application and submit required transcripts, references and standardized test scores. Applicants to the R.N.-B.S. program are not required to submit standardized test scores.

Applicants for admission to the undergraduate program who wish to be considered for early acceptance will be considered if the following criteria are met:

1. Submission of the complete application by Nov. 1.
2. GPA of at least 3.4 on a 4.0 scale (calculated from a minimum of 30 semester hours of credit).
3. SAT test scores of at least 1100 combined verbal and math recentered.

Applicants who hold a baccalaureate degree from an accredited institution in another discipline, but are not registered nurses, may apply to either the traditional or accelerated B.S. program.

Applicants who are registered nurses and who seek a baccalaureate degree apply to the R.N.-B.S. completion program. In addition to traditional admission criteria, applicants must meet the following requirements to be considered:

1. Be graduates of accredited (NLNAC) diploma or associate degree programs in nursing.
2. Hold a current R.N. license or authorization to practice as an R.N. in Virginia or obtain a visa screen certificate issued by the Commission of Graduates of Foreign Nursing Schools. In addition to the above criteria, highly qualified applicants to the R.N.-B.S. program who meet the following criteria are eligible for guaranteed admission:

1. Cumulative GPA of 3.0 on all college courses
2. No grade less than B in any nursing class
3. Three recommendations that highly recommend or recommend without reservation

In addition to taking courses, R.N. students may establish credit toward the baccalaureate degree in several ways:

1. Through transfer of credit from other colleges
2. Through proficiency examinations using the College Level Examination Program for general education and through National League for Nursing standardized examinations for anatomy, physiology, microbiology and nutrition

Information about the CLEP tests may be obtained from the Web at www.has.vcu.edu/bis/clep, or from the CLEP Administrator, Office of Interdisciplinary Studies and Special Student Advising, Virginia Commonwealth University, P.O. Box 142002, Richmond, VA 23284-2002, (804) 828-2333. CLEP tests are offered by appointment. Subject examinations are available in multiple areas as listed in information available for the College Entrance Examination Board. Students may earn full course credit by examination for general education courses.

General education requirements

Traditional program

Tier I: (6 credit hours)
- UNIV 111 and 112

Tier II: (17 credit hours)
- Quantitative literacy: STAT 210 or higher (3)
- Research and academic writing: UNIV 200 (3)
- Humanities/fine arts: PHIL 201 (3)
- Social/behavioral sciences: PSYC 101 (4)
- Natural/physical sciences: BIOL 101 and BIOZ 101 (lab) (4)

Tier III: Capstone course (5 credit hours)
- NURS 496

General education: (34 credit hours)
- Sociology (3)
- Lab science (4)
- Anatomy (4)
- Physiology (4)
- Microbiology (4)
- Nutrition (3)
- Developmental psychology (3)
- Electives (9 credit hours, of which 6 must be 300-level or higher courses)

Nursing major: NURS 201, 202, 261, 325, 335, 345, 355, 365, 366, 371, 416, 425, 471, 478 (61 credit hours)

Total for the degree: 123 credit hours (66 total credits in nursing major)

R.N.-B.S. completion program

Tier I and Tier II: Waived

Tier III: Capstone course (3 credit hours)
- NURS 488

General education and prerequisite course work (53 credit hours)

- STAT 210, its equivalent, or higher (3)
- Anatomy (4)
- Physiology (4)
- English composition (6)

Additionally, students must have completed at least 24 credit hours of the following courses required for the B.S. degree:
- Philosophy (3)
- Humanities (9)
- General psychology (3)
- Developmental psychology (3)
- General sociology (3)
- College lab science (8)
- Microbiology (4)
- Nutrition (3)

(The remaining credit hours must be completed while enrolled in the R.N.-B.S. completion program)

Nursing major: NURS 301, 307, 308, 367, 407, 410, 415, 461, 477 (29 credit hours)

Proficiency credits: Awarded after completion of NURS 308 (35 credit hours)

Total for the degree: 120 credit hours (32 total credits in nursing major)

Accelerated B.S. program

Tier I and II: Met by previous baccalaureate degree (39 credit hours)

Tier III: Capstone course (5 credit hours)
- NURS 496

Nursing prerequisites: anatomy, physiology, microbiology, statistics and developmental psychology covering the lifespan (18 credit hours)

Nursing major: NURS 201, 202, 261, 325, 335, 345, 355, 365, 366, 371, 416, 425, 471, 478 (61 credit hours)

Total for the degree: 123 credit hours (66 total credits in nursing major)

Academic regulations

Progression

Completion of degree requirements – time limit
CPR

Health requirements
Computer proficiency requirement
HIPAA certification training
FERPA Compliance in Clinical Areas

Other requirements
Separation from the school
Reattachment

Progression

The minimum passing grade in the general education courses and the nursing major is a C/satisfactory. Any nursing student who receives less than a C/satisfactory in any course required for the baccalaureate degree must repeat the course with a C/satisfactory or better. Progression to the next level of all prerequisite clinical courses is based upon satisfactory completion of all prerequisite courses of the current year. Non-clinical courses at the next level in the nursing major may be taken before students officially progress to that level. Appeal of all progression issues is made to the Undergraduate Program Committee. The clinical laboratory grading system is satisfactory or unsatisfactory. Unsatisfactory clinical application results in a grade of F for the course.

A student may fail a clinical course prior to the completion of the course under certain circumstances. A student whose conduct is judged to be clinically unsafe may be dismissed at any time from a clinical unit. Unsafe clinical performance is defined as behavior that is actually or potentially injurious to patients or staff and is out of the range of ordinary student mistakes. Dismissal for the remainder of the course results in a failing grade for the course as does any failure to meet course objectives.
There are additional requirements for satisfactory progression in the School of Nursing and all students are responsible for compliance with additional school policies, listed in the School of Nursing Policy Manual, available on the School of Nursing Web site at www.nursing.vcu.edu.

Further, any student who has been convicted of a felony may be ineligible for licensure or employment as a registered nurse in Virginia. Students or applicants should address any questions of this nature to a legal adviser prior to entry.

Completion of degree requirements – time limit
Once the student enrolls in the School of Nursing, the degree requirements must be completed within six calendar years. The credentials and programs of a candidate unable to meet this requirement may be evaluated by the Undergraduate Program Committee upon request. Such a candidate may have to meet additional requirements established during the interval since matriculation.

CPR
Students entering the School of Nursing are required to have current certification in Basic Life Support for Health Care Workers from the American Heart Association before they begin their first clinical nursing course and maintain certification throughout enrollment in VCU School of Nursing.

Students must show a valid CPR certification to the Office of Enrollment and Student Services prior to the first day of classes of each academic year. Students with expired BLS certification will be unable to enroll in clinical courses.

Health requirements
All nursing students will have an annual TB screening valid for the academic year. Nursing students enrolled in clinical courses are also required to complete the hepatitis B vaccination series or to provide proof of a positive antibody titer to the Office of Enrollment and Student Services. The first injection of the series must be received prior to matriculation into the School of Nursing. Any university health-related requirement for full-time students shall also apply to part-time students. Students who have not completed the above requirements may not enroll in clinical courses. Students are required to present annual documentation to the Office of Enrollment and Student Services by the published deadlines.

HIPAA certification training
All students must complete HIPAA training prior to enrollment in their first clinical course.

FERPA Compliance in clinical areas
By a student’s signature on the Student Record Certification Form, the student authorizes the following:

“In my clinical experiences, faculty may discuss my clinical performance with my preceptor or others who supervise my clinical work, including whether my performance is satisfactory.”

Other requirements
As a condition for participation in a practicum or internship experience, students may be required, by the facility providing the experience, to disclose or allow the university to disclose information about their health status or immunizations, academic status or achievements, licensure status, and other information. Further, students may be required, by the facility providing the practicum or internship experience, to undergo a criminal background check, submit to drug screening, waive their right to sue the facility, comply with regulations of the facility and other requirements.

Separation from the school
Before withdrawing from the School of Nursing, the student must drop or withdraw from all nursing courses. The student should contact the university registrar for any additional guidance and requirements for separation from the school.

Readmission
Following dismissal from the School of Nursing, a student may not apply for readmission for two consecutive semesters, including the summer session. In order to be considered for possible readmission, a student must do the following:

1. Obtain an educational assessment from the Office of Health Careers/ Education and Special Services for Students on the MCV Campus (or a comparable agency) or document an assessment completed no earlier than the student's last semester of attendance at VCU.
2. Take a minimum of 9 credits at an academic institution and attain a minimum GPA of 3.0 on these credits.
3. Submit a complete readmission packet:
   - Include a reference letter from a faculty member in one of the courses taken since dismissal from the program.
   - In the personal statement accompanying the admission packet, demonstrate insight into the reasons for the dismissal and present a thoughtful, reasoned plan for success, if readmitted.

The above is intended neither to be all-inclusive nor to imply that completing these activities guarantees a successful application for readmission. Additional information relevant to the student’s particular situation may be required by the Undergraduate Program Committee. All courses required for the nursing major that are taken after the student is readmitted to the program, must be completed with a grade of C/satisfactory or better. If a course is failed with a D/unsatisfactory or below, the student may not proceed in the nursing major and is dismissed from the School of Nursing.

When a student is readmitted after a previous dismissal from the program, the student may not enroll in more than 13 credits per semester of attendance unless the number of nursing credits required by the student’s curriculum plan is greater. In this case, the student may enroll in no more than 15 credits, including nursing courses, per semester. Once a readmitted student has attained a semester GPA of at least 3.0 for at least two consecutive semesters, the credit limit will be rescinded.

Information: The Office of Health Careers/Education and Special Services for Students is located in the VMI Building at 1000 E. Marshall St., Room 202 and can be contacted at (804) 828-9782. Courses to demonstrate amelioration of academic deficiencies may be taken at an appropriate two- or four-year institution. The student should carefully consider the academic difficulties encountered in the School of Nursing and select courses that demonstrate mastery of particular content or directly related skills (e.g. critical thinking or problem solving). That is to say, a broad array of topics from the academic disciplines may be appropriate, particularly if they help the student to think critically, to analyze information or to develop competent writing skills.

Preparatory study for nursing
The University College provides programs in preparation for admission into health sciences programs. For detailed information on pre-nursing, see Preparation for the study of nursing in the UC section of this bulletin.

Nursing, Bachelor of Science (B.S.)
The School of Nursing offers the following tracks in the baccalaureate program: the traditional, the biobehavioral honors track, the accelerated B.S. and the R.N.-B.S. completion. Successful completion of curricular requirements results in a Bachelor of Science degree.

Curriculum
The applicant is responsible for seeking advice from the School of Nursing on courses taken prior to admission.

Commuting and community practice
Students are assigned to a variety of hospitals and health agencies. Occasionally, these assignments may include evening hours or weekends. Transportation is sometimes available to reach these assignments, but use of an automobile is often necessary, especially in community health nursing. Transportation costs vary widely each semester and may range from very little to more than $100. Students who anticipate need of financial assistance for transportation costs should apply to the Office of Financial Aid in advance.

Traditional program
Honors sections are available for a number of courses. A typical curriculum for the traditional program is as follows:

<table>
<thead>
<tr>
<th>Sophomore year, fall semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 261 Health Assessment or Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 201 Critical Thinking About Moral Problems</td>
<td>3</td>
</tr>
<tr>
<td>PHIS and PHIZ 206 Human Physiology and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 304 Life Span Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>STAT 210 Basic Practice of Statistics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>
### Sophomore year, spring semester
- BIOL and BIOZ 209 Medical Microbiology and Laboratory 4
- NURS 201 Concepts of Nursing 3
- NURS 202 Technologies of Nursing Practice 4
- UNIV 200 Writing and Rhetoric Workshop 3
- Lower-level elective 3

### Total
17

### Junior year, fall semester
- NURS 325 Nursing of Adults I 6
- NURS 355 Psychiatric-Mental Health Nursing 5
- NURS 365 Nursing Science I 3
- NURS 371 Evidence-based Practice 3

### Total
17

### Junior year, spring semester
- NURS 335 Nursing of Women I 6
- NURS 345 Nursing of Children 6
- NURS 366 Nursing Science II 3

### Total
15

### Senior year, fall semester
- NURS 425 Nursing of Adults II 6
- NURS 478 Leadership and Management in Health Care: Theory and Application 6
- Upper level elective (300/400-level course) 3

### Total
15

### Senior year, spring semester
- NURS 416 Community Health Nursing 5
- NURS 471 Evidence-based Practice in Nursing 2
- NURS 496 Senior Synthesis 5

### Total
15

### Total credits
95

---

### Biobehavioral honors track
A typical curriculum for the biobehavioral honors track is as follows:

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
</table>

### Sophomore year, fall semester
- NURS 261 Health Assessment or Nursing Practice 3
- PSYC 304 Life Span Developmental Psychology 3
- PHIS and PHIZ 206 Human Physiology and Laboratory 4
- PHIL 230 Reason, Science and the Self 3
- STAT 210 Basic Practice of Statistics (honors section) 3

### Total
16

### Sophomore year, spring semester
- BIOL and BIOZ 209 Medical Microbiology and Laboratory 4
- INTL/POLI 365 International Political Economy 3
- NURS 201 Concepts of Nursing 3
- NURS 202 Technologies of Nursing Practice 4

### Total
14

### Junior year, fall semester
- NURS 325 Nursing of Adults I (honors section) 6
- NURS 355 Psychiatric-Mental Health Nursing 5
- NURS 365 Nursing Science I 3
- NURS 371 Evidence-based Practice 3

### Total
17

### Junior year, spring semester
- NURS 335 Nursing of Women 6
- NURS 345 Nursing of Children 6
- NURS 366 Nursing Science II 3

### Total
15

### Senior year, fall semester
- NURS 425 Nursing of Adults II 6
- NURS 478 Leadership and Management in Health Care: Theory and Application 6
- NURS 512 Advanced Nursing Science (honors section) 3

### Total
15

### Senior year, spring semester
- NURS 416 Community Health Nursing 5
- NURS 496 Senior Synthesis (honors section) 6
- NURS 513 Introduction to Biobehavioral Clinical Research: Honors Section 3

### Total
14

### Total credits
91

---

### R.N.-B.S. completion program
Fifty-three credits of general education courses are required for graduation. The following is a typical curriculum plan for the R.N.-B.S. completion student:

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
</table>

### Fall semester
- NURS 301 Information Literacy in Health Care 3
- NURS 307 Foundations of Professional Nursing I 3
- NURS 367 Applied Principles of Health and Disease 3

### Spring semester
- NURS 308 Foundations of Professional Nursing II 3
- NURS 407 Using Evidence in Clinical Practice 2
- NURS 410 Applied Ethics in Clinical Practice 3
- NURS 461 Advanced Clinical Assessment 3
### Fall semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 415 Community Health Nursing: Theory and Application</td>
<td>5</td>
</tr>
<tr>
<td>NURS 477 Leadership and Management in Health Care</td>
<td>4</td>
</tr>
<tr>
<td>NURS 488 Practicum in Clinical and Management Decision</td>
<td>3</td>
</tr>
<tr>
<td><strong>Making</strong></td>
<td></td>
</tr>
<tr>
<td>Upper-division credits will be awarded after successful completion of NURS 308</td>
<td>35</td>
</tr>
</tbody>
</table>

**Total required nursing credits** 67
The School of Pharmacy was established officially in 1898, the University College of Medicine had a school of pharmacy when it opened in 1893. The two-year curriculum gave way to a three-year program in 1925, and in 1932 the school required four years of college work and a Bachelor of Science degree was awarded. In 1960, the program lengthened to a five-year course leading to a Bachelor of Science in Pharmacy degree. In 1975, authority was granted to offer to selected students a six-year program leading to the Doctor of Pharmacy degree and this program was adopted as the only professional offering by the school in 1995. The School of Pharmacy currently enrolls students in a four-year professional Doctor of Pharmacy program curriculum following completion of at least three years of pre-professional studies taken at VCU or elsewhere. In 1996 a part-time program was offered that permits current Bachelor of Science in Pharmacy degree holders to earn the Doctor of Pharmacy degree in a nontraditional format requiring students to come to campus infrequently. This program is in the process of being phased out and no longer accepts students for enrollment. Since 1971, all pharmacy students have participated in a clerkship program (now referred to as advanced pharmacy practice experiences) during the final year of the curriculum. Beginning 2008, the school added introductory pharmacy practice experiences during the first three years of the program to gradually transition the student from the academic classroom setting into the practice arena. Students spend their final year in a variety of practice settings under the supervision of highly qualified faculty preceptors.

The authority to award graduate degrees in the pharmaceutical sciences was granted by the Graduate Council in 1952. Departments in the school have the responsibility for administering a graduate program leading to the M.S. and Ph.D. in Pharmaceutical Sciences. This program includes areas of specialization in medicinal chemistry, pharmaceutics, pharmacotherapy and pharmacy administration. These programs provide the preparation and research experience for academic, governmental and industrial careers. Graduate degrees in pharmaceutical sciences do not provide eligibility for licensure as a pharmacist.

Students may elect to pursue a joint Pharm.D./M.S., Pharm.D./Ph.D., Pharm.D./M.B.A. or Pharm.D./M.P.H. program. Such students must apply to, and be accepted by, both programs separately.

**Administration**

410 N. 12th St.
P.O. Box 980581
Richmond, VA 23298-0581
(804) 828-3000
Fax (804) 827-0002
http://www.pharmacy.vcu.edu

Victor A. Yanichick
Dean

**Accreditation and Complainant policy**

**Pharmacy (Pharm.D.) accreditation**

The Doctor of Pharmacy degree program at the Virginia Commonwealth University School of Pharmacy is fully accredited by the Accreditation Council for Pharmacy Education (ACPE), 20 N. Clark St., Suite 2500, Chicago, IL 60602-5109. Accreditation standards are available in the school’s Office of Admissions and Student Services and via the ACPE website at www.acpe-accredit.org. Additionally, the school is a member of the American Association of Colleges of Pharmacy.

**Complainant policy**

ACPE has an obligation to assure itself that any institution that seeks accreditation status for its professional degree program conducts its affairs with honesty and frankness. Students who have complaints about the school’s ability to meet accreditation standards or adhere to ACPE policies and procedures shall be submitted in writing to the Associate Dean for Admissions and Student Services, VCU School of Pharmacy, 410 N. 12th St., Room 500, Richmond, VA 23298-0581. The complainant is welcome to make an appointment to meet with school administrators to discuss his or her complaints and options for resolution. If they are not satisfied with the response by the school’s representative/s, then complainants may contact ACPE at 135 S. LaSalle St., Suite 4100, Chicago, IL 60603 or www.acpe-accredit.org/complaints with a complaint. A record of written complaints about the school’s adherence to ACPE accreditation standards or policies and procedures will be maintained for ACPE to review at the time of an accreditation site visit.

**Statement of purpose**

The School of Pharmacy at Virginia Commonwealth University exists to provide exceptional programs benefiting the commonwealth of Virginia and society by offering the highest quality education and training for the development of health care practitioners, scientists, professional leaders and responsible citizens. These individuals are committed to shaping the health care world of tomorrow while serving society’s health care needs today.

**Facilities**

The School of Pharmacy is located in the Robert Blackwell Smith Building at 12th and East Clay streets. This building — named in honor of a distinguished former dean of pharmacy, former president of the Medical College of Virginia and former provost of the MCV Campus — was completed in 1984 with the help of contributions from many alumni and friends of the School of Pharmacy.

Additional classrooms, offices and laboratories are located in McGuire Hall and the Virginia BioTechnology Research Park, both located within a few blocks of the Smith Building.

Classes for students in pharmacy also are conducted in Sanger Hall, located between 11th and 12th streets on East Marshall Street, and McGuire Hall, located at the corner of 12th and Clay streets. In conjunction with the VCU Health System, students receive clinical experience in the VCUHS’s MCV Hospitals and clinics. Other facilities available for teaching include area hospitals and pharmacies. The major library holdings are in the Tompkins-McCaw Library at 12th and East Clay streets.

Location in a major health sciences center provides excellent opportunities for interdisciplinary research and access to clinical facilities. The school is well equipped for graduate research and provides leadership to the VCU Institute for Structural Biology and Drug Discovery at the Virginia BioTechnology Research Park. The institute makes use of synthetic medicinal chemistry, X-ray crystallography, NMR, protein and nucleic acid chemistry, bacterial enzymology, and molecular pharmacology to promote drug development. Several businesses have been spawned through the institute and two new drugs have entered clinical trials.

The Department of Pharmacy supports the Center for Drug Studies (CDS), a fully staffed facility for conducting Phase I-III research in humans.
The profession of social work

The goals of the profession of social work are to provide services to persons who are vulnerable due to a lack of personal, social and/or institutional resources to meet their emotional, health and economic needs. Social work practice is the application of professional knowledge, skills and values across a range of settings and populations. The focus of practice is on individuals, couples, families, groups and communities. In addition to direct clinical social work practice, social workers are involved in the administration of human service programs, social planning, the development of social policies, research and evaluation, and teaching.

In order to achieve the goals of promoting social justice and enhancing well-being for individuals, families, groups and communities, social workers provide a variety of services primarily in public and nonprofit organizational contexts. Examples of the range of settings in which social workers practice include community centers, public social services, child welfare, residential treatment facilities, schools, community mental health agencies, family and children’s service agencies, psychiatric and acute care hospitals, substance abuse treatment facilities, services for the elderly, court services and adult and juvenile rehabilitation facilities.

Professional education for social work practice dates to the early 1900s. The contributions of the profession are evidenced in health and mental health care, the well-being of children and families, the development and implementation of social policies, the planning, delivery and evaluation of human services, and a broad base of research on the human condition. The knowledge base of the profession and the integration of related social, behavioral and biological sciences acquired through professional education facilitates the contributions of social workers in multidisciplinary contexts.

Social work practice is designed to enrich quality of life by enabling individuals, groups, communities and organizations to achieve their greatest potential development. The goal of the School of Social Work at VCU is to provide professional education in response to these needs.

Administration

1001 West Franklin Street
P.O. Box 842027
Richmond, Virginia 23284-2027
(804) 828-0703
Fax: (804) 828-0716
www.vcu.edu/slwweb

James E. Hinterlong
Dean
decision-making processes. In addition, the association enables students to conduct a variety of social and professional activities throughout the year.

M.S.W. Student Association
The Master of Social Work Student Association is the organization of M.S.W. students enrolled in the school. Established for the purposes of facilitating communication among students and between the student body and the school, the association provides a means by which student concerns and ideas can be formulated and acted upon. It also enables students to conduct a variety of social, civic and educational activities throughout the year.

This organization plays a vital role in the educational process. Student contributions to the governance and curriculum of the school are of value to both the institution and the students. Participation in the decision-making process is accomplished through student representation on committees. Faculty and students work closely together throughout the year to meet the needs of graduate social work education. Students participate as full members of committees within the school.

Association of Black Social Workers – VCU Chapter
The Association of Black Social Workers was established to create and maintain an atmosphere of unity and support among black students in the School of Social Work. It serves to assist students in their personal and professional growth and development. Membership in this organization helps students to develop a keen awareness of the acute needs of the black community and the active role that must be assumed by the dedicated black professional social worker in promoting the general welfare of black citizens. To attain these goals, the organization utilizes the educational process and related experiences of students at the school and in fieldwork. Students are encouraged to participate in all phases of the academic environment.

International Student Association (Northern Virginia Campus)
The International Student Association provides a forum for discussion and serves as a resource for information regarding all aspects of international social work. The association sponsors lectures, speakers and open discussions. All students, faculty or alumni who are interested in international social work are invited to become members or to attend meetings.

Doctoral Student Association
The Doctoral Student Association is a collegial association available to all doctoral students regardless of full- or part-time status. Its primary purpose is to provide information, resources, advocacy and support to students throughout the doctoral program experience. Governance of the association is conducted on a rotating leadership and consensual basis. The Doctoral Student Association provides doctoral student representatives to various committees of the school governance structure.

Other student interest groups
The School of Social Work supports the development of groups that address a variety of student needs and interests.

Social work courses
Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to undergraduate- and master’s-level social work (SLWK) courses.

This link will take you to a list doctoral-level courses in social work (SWKD).

International Social Justice Studies, Certificate in (Undergraduate certificate)
The Certificate in International Social Justice Studies is an interdisciplinary program offered by the School of World Studies and the School of Social Work. The certificate program combines international social justice, foreign languages and area studies into a unique curriculum intended to equip students for careers in a variety of fields both in the United States and abroad. Students concentrating in liberal arts or social work as well as other majors are encouraged to apply. Certification through this program requires 30 hours of credits from the list of courses below.

Curriculum requirements
6 credits: International studies. Students take two of the three courses within one of the following tracks:

Former Soviet Union
• HIST 321, 322 History of Russia
• INTL/SOCY 328 Russian Society in Transition
• INTL/POLI 354 Russian and Post-Soviet Politics
• Spanish-speaking world
• HIST 109, 110 Survey of Latin American History
• ANTH/INTL 349 Rethinking a Continent: Latin America
• INTL/POLI 353 Latin American Governments and Politics

9 credits: Languages. Students select three courses within one of the following language tracks:

Russian
• RUSS 201 Intermediate Russian
• RUSS 202 Intermediate Russian Readings
• RUSS 311 Conversation and Media
• RUSS 330 Literature and Culture:
  • RUSS 422 Russian Film
  • RUSS 491 Topics in Russian

Spanish
• SPAN 201 Intermediate Spanish
• SPAN 202 Intermediate Spanish Readings
• SPAN 205 Intermediate Spanish Conversation
• SPAN 300, 301 Advanced Grammar and Writing
• SPAN 305 Spanish Conversation
• SPAN 307 Spanish Conversation and Film
• SPAN 311 Spanish Through the Media
• SPAN 320 Civilization of Spain I or 321 Latin American Civilization I
• SPAN 330 Survey of Spanish Literature
• SPAN 331/INTL 331 Survey of Latin American Literature
• SPAN 400 Spanish Translation
• SPAN 401/LING 401 Comparative Structures

9 credits: International social justice.
• INTL 341/RELS 340 Global Ethics and the World’s Religions
• SLWK 311 Social Work and Oppressed Groups
• WRLD 210 Introduction to International Social Justice Studies

3 credits: Cross-cultural communication. Students select one of the following courses:
• ENGL/INTL 454/ANTH 450 Cross-cultural Communication
• INTL 327/MGMT 329 Introduction to Intercultural Communication
• SLWK 230 Communication in the Helping Process

3 credits: Experiential learning. Students select one of the following ways in which to apply program content to international social justice settings.
• INTL 493 International Studies Internship
• Approved study abroad program
• Approved service-learning course

Language/cultural immersion experience. Prior to completing all of the certificate requirements students must also demonstrate successful utilization of their language, cross-cultural, social work and social justice knowledge and skills.
in an approved language/cultural immersion context. This can be accomplished through study abroad program, internship, service-learning course or life/work experience that has been approved by the student’s academic adviser.

**B.S.W. Program**

**Humberto Fabelo**  
Director, B.S.W. Program  
hfabelo@vcu.edu  
(804) 828-0933

The B.S.W. Program administers the undergraduate offerings of the School of Social Work, including the Bachelor of Social Work and the minor in social welfare.

Guided by the principle of promoting social justice, the goals of the B.S.W. Program are:

1. To provide an integrated curriculum based on the knowledge, skills, ethics and values essential for beginning generalist social work practice.
2. To offer an educational experience that facilitates the critical analysis of social work knowledge and practice.
3. To provide classroom and field instruction experiences designed to promote culturally sensitive practice with diverse and oppressed groups.
4. To provide an environment that encourages lifelong learning and prepares students for professional growth and development.

**Social welfare, minor in**

A minor in social welfare is available to non-social work majors. This minor consists of 18 credits, including SLWK 201 Introduction to Social Work and SLWK 422 Social Welfare Legislation and Services. The remaining 12 credits can be fulfilled by completing SLWK 230 Communication in the Helping Process, SLWK 311 Social Work and Oppressed Groups, SLWK 313 Person in Society I, SLWK 330 Person in Society II, SLWK 380 Foundations of Social Work Research I, SLWK 381 Foundations of Social Work Research II or SLWK 431 Person in Society III. Practice and field courses are restricted to majors.

**Social Work, Bachelor of (B.S.W.)**

The Bachelor of Social Work requires completion of 121 credits, including 46 credits in the major. The curriculum of the baccalaureate program is specifically designed to prepare students for beginning-level generalist social work practice. This practice model requires a broad base of knowledge about individuals, families, groups, communities and organizations and an appreciation of cultural diversity. General education courses provide an essential foundation for the upper-level professional curriculum and are required for admission to junior and senior social work courses.

**Curriculum**

**Freshman and sophomore year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 103 Introduction to Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL and BIOZ 101 Biological Concepts and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>MATH 131 Introduction to Contemporary Mathematics or higher</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 201 Critical Thinking About Moral Problems, PHIL 211</td>
<td>3</td>
</tr>
<tr>
<td>History of Ethics, PHIL 212 Ethics and Applications, PHIL 213</td>
<td>3</td>
</tr>
<tr>
<td>Ethics and Health Care, PHIL 221 Critical Thinking or PHIL 222 Logic</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 101 Introduction to Psychology</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 304 Life Span Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 201 Introduction to Social Work</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 230 Communication in the Helping Process</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 101 General Sociology</td>
<td>3</td>
</tr>
<tr>
<td>UNIV 111 and 112 Focused Inquiry I and II</td>
<td>6</td>
</tr>
<tr>
<td>UNIV 200 Writing and Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>General requirements and electives</td>
<td>22</td>
</tr>
</tbody>
</table>

**Junior year: first semester (fall or spring)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWK 311 Social Work and Oppressed Groups</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 313 Person in Society I</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 380 Foundations of Social Work Research I</td>
<td>3</td>
</tr>
<tr>
<td>General requirements or electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**Junior year: second semester (spring, summer)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWK 330 Person in Society II</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 332 Social Work Practice: Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 381 Foundations of Social Work Research II</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 393 Junior Field Instruction</td>
<td>3</td>
</tr>
<tr>
<td>General requirements or electives</td>
<td>3</td>
</tr>
</tbody>
</table>

**Senior year: fall semester only**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWK 441 Social Work Practice I</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 494 Senior Field Instruction I</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 422 Social Welfare Legislation and Services or SLWK 431 Person in Society III</td>
<td>3</td>
</tr>
<tr>
<td>General requirements or electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**Senior year: spring semester only**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWK 442 Social Work Practice II</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 495 Senior Field Instruction II</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 422 Social Welfare Legislation and Services or SLWK 431 Person in Society III</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 499 Senior Seminar</td>
<td>1</td>
</tr>
<tr>
<td>General requirements or electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total credits**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>121</td>
</tr>
</tbody>
</table>

**General requirements and electives**

| Art* (minimum) | 2       |
| Biology**      | 3       |
| Foreign language (101-102 level) minimum       | 8       |
| General electives*** (minimum)                 | 12      |
| Humanities**  | 6       |
| PSYC 407**    | 3       |
| Social-behavioral sciences**                   | 9       |

* From the College of Humanities and Sciences approved list of art courses for non-School of the Arts majors.

** From the School of Social Work approved list for these requirements. Students should consult with their academic adviser to make appropriate choice.

*** General electives are courses of the student’s choosing.

**Academic policies**

**Admission requirements**

For admission to the professional preparation program (300- and 400-level social work courses) offered in the junior and senior years, students must complete at a minimum 54 credits, including the specified requirements in the freshman and sophomore curriculum. In addition, to gain admission to the professional preparation program, students must achieve a minimum grade of C in UNIV 111, 112 and 200 and B in SLWK 201 and SLWK 230, and must have a minimum GPA of 2.5 in all course work completed.

**Transfer students**

Students who transfer to VCU from another institution as social work majors are not required to complete the UNIV 111 and 112 sequence. Instead, these students must transfer three credits in writing and composition course work with a grade of C or better (approved by the program director) in lieu of UNIV 111. Students may also transfer three additional credits in writing and composition course work with a grade of C or better (approved by the program director) in lieu of UNIV 112 or complete UNIV 200 at VCU with a grade of C or better. The remaining three credits from the UNIV 111, 112 and 200 sequence requirement may be completed as general electives. This policy applies only to students who transfer to VCU after their freshman year and may not be used by students who began their studies as freshmen at VCU.
Application process
Students eligible to register for upper-level social work courses need to make an appointment with their adviser to review and complete the “Application for Admission to the B.S.W. Professional Preparation Program” form. This form is available from the Office of Student Services, Room 107, Raleigh Building. Although the B.S.W. program can be completed on a part-time basis, it cannot be completed exclusively in the evening because of field practicum requirements and the scheduling of some classes.

Foreign language requirement
Students who place into or are waived out of the 101 level in a foreign language must complete the 102 level in the same language. Students who place into or are waived out of the 101 and 102 level in a foreign language must complete at least one college-level foreign language course in any language. Credits earned by CLEP do not count toward the fulfillment of this requirement.

Continuing in the program and graduation
All students must successfully complete the courses outlined in the curriculum. Students must earn a C or better in all 300-level social work courses before entering the 400-level courses. Students must have a C or better in all required social work courses before graduation.

A student who earns a grade of D or F in any required social work course may repeat the course once. If a grade of D or F is earned in the repeated course, the student will be terminated from the B.S.W. program.

Transfer of credits from other colleges or universities or from other programs at VCU is determined on an individual basis. Credit is not given for life experiences. A minimum of 121 credits is required for the Bachelor of Social Work.

Field placements require students to spend 14 hours a week in an agency and cannot be completed on nights and weekends.

As a condition for graduation, students must submit in the spring term of their senior year a portfolio of selected assignments. Assignments are to be selected according to the specific instructions in each 200-, 300- and 400-level social work course syllabus.

There are additional policies that affect students’ progression in the professional degree program. Students are responsible for compliance with these policies. They are listed in the B.S.W. Handbook, which is available on the School of Social Work Web site at www.vcu.edu/slwweb.

Course restrictions
Practice (SLWK 332, 441 and 442) and field education (SLWK 393, 494-495) courses and the senior seminar (SLWK 499) are restricted to social work majors only. Students minoring in social welfare, or other students with permission of program director or course instructor, may take SLWK 311, 313, 330, 380, 381, 422 and 431. In all cases, however, prerequisites must be satisfied.

Honors in social work
Undergraduate social work majors may earn honors in social work by excelling academically and completing a research-based honors thesis under the supervision of faculty mentors. Students apply for honors in social work in the second semester of their junior year (spring or summer). To graduate with honors in social work, students must satisfy all of the following conditions:

- Earn a 3.5 cumulative grade point average.
- Earn a grade of A in SLWK 380 and SLWK 381 and a minimum grad of B in all other social work courses.
- Complete 6-9 credits of independent study (SLWK 492) with a minimum grade of B to propose and implement a research project under the supervision of a faculty mentor.
- Present and successfully defend in writing and orally the findings from the research project in the form of an honors thesis to a committee of three faculty members (one of whom is the student’s mentor).

Students who meet these requirements and all other graduation requirements of the university will have honors in social work noted on their transcripts. For further information about the application process and detailed instructions for completing the honors thesis, students should contact the B.S.W. program director.
VCU entered a new era when it implemented, as one of its highest priorities, a new university-wide matrix academic organization called VCU Life Sciences, created in response to the need to prepare students for the anticipated growth in new life sciences jobs in the coming decades. The skills identified for these jobs require highly interdisciplinary or multidisciplinary approaches, often falling between the boundaries of traditional academic disciplines. The way that the life sciences are understood and taught is likely to be fundamentally different, with increasing emphasis on systems biosciences as an important complement to more traditional, purely reductive approaches. The objective of Phase II of VCU’s strategic plan specifically outlines the need to bring VCU’s major academic and administrative divisions together to work on mutual initiatives that will accomplish VCU’s goal of national leadership. VCU Life Sciences is a response to that objective.

Faculty

VCU Life Sciences faculty members are drawn from departments across the university. Lists of participating faculty and academic affiliations are available on the VCU Life Sciences Web site for each program.

Facilities

VCU Life Sciences comprises the resources and interests not only of the Monroe Park Campus and the VCU Medical Center, but also the Virginia BioTechnology Research Park and the Inger and Walter Rice Center for Environmental Life Sciences, a property of 342 acres overlooking the James River in Charles City County. The $27 million Eugene P. and Lois E. Trani Center for Life Sciences houses administrative offices, the Center for Environmental Studies, state-of-the-art laboratories and classrooms, and a climate-controlled greenhouse. The Center for the Study of Biological Complexity, including the Center for High Performance Computing at VCU, is housed in Grace E. Harris Hall. VCU Life Sciences supports two university centers for its research and teaching efforts: the Center for Environmental Studies and the Center for the Study of Biological Complexity.

Administration

1000 West Cary Street
P.O. Box 842030
Richmond, Virginia 23284-2030
(804) 827-5600
Fax: (804) 828-1961
www.vcu.edu/lifesci

Thomas F. Huff
Vice Provost for Life Sciences

Gregory A. Buck
Director of the B.S., B.S.-Master’s and Master’s Programs in Bioinformatics and Director of the Center for the Study of Biological Complexity

Herschell S. Emery
Director of Undergraduate Curricula

Gregory C. Garman
Director of the B.S., B.S.-Master’s and Master’s Programs in Environmental Studies and Director of the Center for Environmental Studies

Robert M. Tombes
Director of the Ph.D. Program in Integrative Life Sciences

VCU Life Sciences courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Undergraduate and graduate Bioinformatics BNFO course descriptions.
Undergraduate and graduate Environmental Studies ENVS course descriptions.
Undergraduate and graduate Environmental Studies Laboratories ENVZ course descriptions.
Undergraduate and graduate Life Sciences LFSC course descriptions.

Undergraduate information

General education requirements

The general education program for VCU Life Sciences is designed to further the university’s commitment to a core academic experience common to all of its students while providing a solid foundation for those students seeking a 21st-century life sciences education. This general education program meets the goals and competencies of the VCU Core Curriculum, actively engaging students in a learning-centered program that helps them to make better sense of their learning by providing a core of shared academic experiences. The Core Curriculum provides students with opportunities to improve oral and written communication skills, to develop critical thinking abilities, to experience working on collaborative projects, to attain information fluency, to achieve quantitative literacy and to understand ethical perspectives and civic responsibilities in the 21st century. Moreover, the VCU Life Sciences general education program enhances the university core curriculum with courses that provide the competencies necessary for a future in the dynamic and global fields of the life sciences.

The VCU Life Sciences general education program totals 27 to 39 credit hours within the following major divisions:

Foundational courses: 12 credit hours

LFSC 301 Integrated Life Sciences Research
UNIV 111 Focused Inquiry I
UNIV 112 Focused Inquiry II
Approved research and academic writing course (university core)

Quantitative literacy: 3-7 credit hours

MATH 151 Precalculus Mathematics, by credit or placement
STAT 210 Basic Practice of Statistics or STAT 212 Concepts of Statistics

Core competency courses: 9 credit hours

One course chosen from each of the following categories of university-approved core courses (see university core lists):

Humanities/fine arts
Social/behavioral sciences
Natural/physical sciences

Global literacy: 0-8 credit hours

Completion of a foreign language through the 102 level or an equivalent course or by placement

Capstone experience: 3 credit hours

An approved course integrating the core curriculum program with the student’s major

Center for Environmental Studies

The undergraduate and graduate programs in environmental studies are interdisciplinary in nature, exposing students to the critical links between the areas of environmental life sciences, technology and policy.

At the undergraduate level, students gain the necessary skills for entry-level field and research positions. Class lectures and guest speakers introduce the importance of policy-making and awareness in the environmental field, while laboratory and internship experiences provide a working knowledge of the latest in environmental technology and field practices.

The graduate programs provide two options for students to further their studies in the environmental life sciences. The Master of Science in Environmental Studies is a thesis-based program designed for those individuals interested pursuing research in the environmental field. The Master of Environmental Studies (the non-thesis program) is a terminal, two-year professional degree for individuals working in the private/public sector of the environmental field.

Administration

Gregory C. Garman
Director of the B.S., B.S.-Master’s Programs in Environmental Studies and Director of the Center for Environmental Studies

www.vcu.edu/cesweb

Environmental studies courses
Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow these links to environmental studies (ENVS) courses or the (ENVZ) laboratories.

Follow this link to life sciences (LFSC) courses.

### Environmental Studies, Bachelor of Science (B.S.)

The Bachelor of Science in Environmental Studies requires a minimum of 120 credits.

Along with the general education requirements of VCU Life Sciences, this curriculum requires 32-33 credits in core science and mathematics courses and 37-38 credits in environmental studies core courses.

### Core science and mathematics requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 151</td>
<td>Introduction to Biological Science I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOZ 151</td>
<td>Introduction to Biological Science Laboratory I</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHEM 101</td>
<td>General Chemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEZ 101</td>
<td>General Chemistry Laboratory I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENVS/GEOL 401 Meteorology and Climatology</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVS/GEOL 411 Oceanography</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVS/ENVS 105 and GEOL/ENVS 105 Physical Geology and Laboratory</td>
<td>3 and 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 151</td>
<td>Precalculus Mathematics</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHYS 201</td>
<td>General Physics or PHYS 207 University Physics I</td>
<td>4 or 5</td>
<td></td>
</tr>
<tr>
<td>STAT 210</td>
<td>Basic Practice of Statistics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>STAT 314</td>
<td>Applications of Statistics</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Core environmental studies requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 152</td>
<td>Introduction to Biological Science II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOZ 152</td>
<td>Introduction to Biological Science Laboratory I</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>BIOL 317</td>
<td>Ecology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 332/ENVS 330 Environmental Pollution or BIOL 432</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology of Polluted Waters</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 102</td>
<td>General Chemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEZ 102</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ECON 325</td>
<td>Environmental Economics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENVS/GEOL 335 Environmental Geology</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVZ/GEOL 335 Environmental Geology Laboratory</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVS 490</td>
<td>Research Seminar in Environmental Studies</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHYS 202</td>
<td>General Physics or PHYS 208 University Physics II</td>
<td>4 or 5</td>
<td></td>
</tr>
<tr>
<td>POLI/ENVZ 311 Politics of the Environment</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCY/POLI 320 Research Methods in the Social Sciences</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

One additional environmental studies course chosen with adviser’s approval

### Environmental Studies elective

from at least one of their major professors attesting to their interest and competence in environmental studies.

Students failing to meet the minimum standards for admission to the accelerated program due to exceptional circumstances will be allowed to appeal to the environmental studies graduate admissions committee for special admission. However, under no circumstances will students who fail to meet the graduate student standards of performance outlined in the Graduate Bulletin be admitted to the accelerated program.

The environmental studies undergraduate and graduate studies program directors jointly will provide guidance for students who are accepted into the accelerated program. This guidance will include a review of all of the program degree requirements, both graduate and undergraduate, and the development of an appropriate plan of study.

The requirements for the B.S. in Environmental Studies and the Master of Environmental Studies are not reduced by the accelerated program. However, 12 hours of graduate course work may be applied toward both degrees for qualified students in the program. The table below outlines the undergraduate requirements that would be fulfilled by the corresponding graduate courses. Where special circumstances exist (e.g., student has already completed a fulfilled course prior to applying to the accelerated program), another undergraduate requirement may be fulfilled by the listed graduate course with the approval of both the graduate and undergraduate program directors.

### Accelerated B.S.-M.Envs. allowable graduate courses and undergraduate credits

<table>
<thead>
<tr>
<th>Shared graduate class</th>
<th>Undergraduate requirement fulfilled</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 543 Statistical Methods I</td>
<td>STAT 314 Applications of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 550 Ecological Risk</td>
<td>ENVS 330 Environmental Risk</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 601 Survey in Environmental Studies</td>
<td>SOCY/POLI 320 Research Methods in the Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>ENVS elective</td>
<td>ENVS elective</td>
<td>3</td>
</tr>
</tbody>
</table>

### Approved graduate electives

ENVS/URSP 521 Introduction to Geographic Information Systems
ENVS 591 Topics in Environmental Studies
ENVS 602 Environmental Technology
ENVS/PADM 628 Environmental Policy and Administration

Following the completion of the undergraduate requirements, the student may complete the master’s degree within one year. The recommended approach would be to complete the hands-on component of the degree (internship or independent study) during the summer following completion of the undergraduate requirements. All additional requirements could then be completed in two nine-hour semesters. However, students may also opt to postpone the hands-on component of the degree until the summer following the completion of all graduate course work.

### Environmental Studies, Certificate in (Post-baccalaureate undergraduate certificate)

The environmental studies certificate is for students who already hold a bachelor’s degree in another field and wish to pursue studies in the environmental studies field. The certificate can help prepare students for work in such fields as industrial pollution control, municipal water treatment, environmental planning and analysis, biological monitoring, and science writing and reporting.

The Post-baccalaureate Certificate in Environmental Studies requires 36 credits, which includes four environmental courses and two statistics courses listed below. Electives to complete the certificate may be selected from the ENVS-listed courses and from courses in related departments. Consult the environmental studies program coordinator or adviser for course approvals. At least one course must be taken from the natural sciences and one from the social sciences. Of the 36 credits, 24 credits must be at the 300 level or above. A maximum of 11 of the environmental studies-related credits and all six of the statistics credits may be transferred from course work completed before or after receiving the bachelor’s degree. At least 18 approved credits must be taken at VCU.

Post-baccalaureate certificate students must apply for admission using an undergraduate application form. Normally, a GPA of 2.7 or better is required for
admission. Please contact the Center for Environmental Studies for the most current curriculum guidelines.

### Required courses for certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 325 Environmental Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENVS/POLI 311 Politics of the Environment</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 490 Research Seminar in Environmental Studies</td>
<td>3</td>
</tr>
<tr>
<td>STAT 210 Basic Practice of Statistics or MGMT 301</td>
<td>3</td>
</tr>
<tr>
<td>Business Statistics</td>
<td></td>
</tr>
<tr>
<td>URS/P/ENV/GEOG 332 Environmental Management</td>
<td>3</td>
</tr>
<tr>
<td>Three additional credits in statistics above STAT 210</td>
<td>3</td>
</tr>
</tbody>
</table>

(Students may not receive credit for both STAT 210 and MGMT 301.)

### Additional recommended courses

- BIOL 151 and 152 Introduction to Biological Science I and II and BIOZ 151L and 152L, Introduction to Biological Science Laboratory I and II
- CHEM 101-102 General Chemistry and CHEZ 101 and 102 General Chemistry Laboratory I and II
- ENVS/POLI 311 Politics of the Environment
- PHYS 207 University Physics I
- MATH 200 Calculus with Analytic Geometry
- MATH 211 Mathematical Structures
- CHM 101 General Chemistry
- CHEZ 101 General Chemistry Laboratory I
- BIOL 218 Cell Biology
- CHEM 301 Organic Chemistry
- STAT 212 Concepts of Statistics***

Follow this link to life sciences (LFSC) courses.

### Bioinformatics, Bachelor of Science (B.S.)

This bioinformatics program consists of a core curriculum that provides the basics of biology, chemistry, computer science and statistics, as well as an introduction to the field of bioinformatics.

Students wishing to pursue the bioinformatics major must apply for admission into the program. High school seniors as well as students transferring to VCU should follow the regular VCU admissions process and deadlines, being sure to indicate clearly in their application that they wish to apply to the bioinformatics program. Continuing VCU students wishing to apply to the program will find information about the application process at [www.vcu.edu/csb/bioinformatics/bachelor/index.htm](http://www.vcu.edu/csb/bioinformatics/bachelor/index.htm) or by calling the director of undergraduate curricula at (804) 828-0559 or the Center for the Study of Biological Complexity at (804) 827-0026.

Transfer students and continuing VCU students with at least 15 college credits should present a suggested college GPA of 3.0 including relevant course work in science, math or computer science.

### Degree requirements

The bachelor’s program in bioinformatics requires:

- Breadth training via VCU Life Sciences general education requirements.
- Specific training in the collateral course work and bioinformatics core.
- Focused training in the areas of biology/genomics, computational science or quantitative/statistical bioinformatics through the track-specific courses.

Students may choose from three tracks: biology/genomics, computational science and quantitative/statistical.

The Bachelor of Science in Bioinformatics requires a total of 120 credits.

### General education

- 16 to 30 credits not met within program
Refer to the [General education requirements](#).

### Outside electives

- 11 to 15 credits

### Collateral course work

- 15 credits

- LFSC 301 Integrative Life Sciences Research
- MATH 200 Calculus with Analytic Geometry
- MATH 211 Mathematical Structures
- PHYS 207 University Physics I

* Preferred. With program approval, PHYS 201 may be substituted.

### Core courses

- 45-46 credits

Students must take the following courses regardless of chosen track.

#### Bioinformatics

- BIOL/BNFO 540 Fundamentals of Molecular Genetics
- BNFO 251 Phage Discovery I**
- BNFO 252 Phage Discovery II***
- BNFO 301/Biol 351 Introduction to Bioinformatics
- BNFO 420 Applications in Bioinformatics

#### Biology

- BIOL 151 Introduction to Biological Science I
- BIOL 152 Introduction to Biological Science II
- BIOL 218 Cell Biology

#### Chemistry

- CHEM 101 General Chemistry
- CHEZ 101 General Chemistry Laboratory I
- CHEM 102 General Chemistry
- CHEM 301 Organic Chemistry

#### Computer science

- Either CMSC 101 Introduction to Computer Science followed by CMSC 255 Introduction to Programming; or CMSC 255 followed by CMSC 256 Data Structures and Object Oriented Programming

#### Statistics

- STAT 212 Concepts of Statistics***

Follow this link to bioinformatics (BNFO) courses.

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**Center for the Study of Biological Complexity**

The Center for the Study of Biological Complexity is a new multidisciplinary focus of research and scholarly activity within VCU Life Sciences. The mission of the center is to apply the principles of complexity to contemporary biological problems in all aspects of research and scholarly activity, supporting research in integrative molecular, cellular and developmental biology.

### Administration

**Gregory A. Buck**  
Director of the B.S., B.S.-Master’s and Master’s in Bioinformatics and Director of the Center for the Study of Biological Complexity

[www.vcu.edu/csb](http://www.vcu.edu/csb)

### Bioinformatics courses

Descriptions for all courses offered by the university may be accessed through the online courses database at [www.pubapps.vcu.edu/vcucourses](http://www.pubapps.vcu.edu/vcucourses). You may search by unit, subject or keyword, as well as by degree level.

Follow this link to bioinformatics courses.
STAT 314 Applications of Statistics, or
STAT 321 Introduction to Statistical Computing**

** Preferred. With program approval, BIOZ 151-152 may be substituted.

*** Preferred. With program approval, STAT 210 may be substituted.

^ Students in the quantitative/statistical track take STAT 314 for this core requirement.

Bioinformatics tracks – 18 credits

In order to build a strong undergraduate foundation in at least one area of bioinformatics, students in both the B.S. and the B.S.-master’s programs must select one of the following three tracks, each composed of 18 credits. Depending upon the track selected, eight to 14 of these credits are specified as required courses, while other credits may be selected as electives from a track list.

Students pursuing the B.S.-master’s program are strongly encouraged to use these electives to optimize their preparation for their intended master’s track.

### Biological/genomic track

**Required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 476 Biology Capstone Laboratory or</td>
<td></td>
</tr>
<tr>
<td>BIOL/BNFO 541 Laboratory in Molecular Genetics* (WI, B.S.-Master’s)</td>
<td></td>
</tr>
<tr>
<td>CHEM 302 Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 403 Biochemistry I</td>
<td>3</td>
</tr>
<tr>
<td>* BIOL/BNFO 541 should usually not be taken before BIOL/BNFO 540 Fundamentals of Molecular Genetics, a core requirement.</td>
<td></td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 310 Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 310 Laboratory in Genetics (.5 WI)</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 317 Ecology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 317 Ecology Laboratory (WI)</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 455 Immunology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 476 Biology Capstone Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>BIOL/BNFO 541 Laboratory in Molecular Genetics (WI)</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 550 Ecological Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BNFO 440 Computational Methods in Bioinformatics</td>
<td>3</td>
</tr>
<tr>
<td>BNFO 491 Special Topics in Bioinformatics</td>
<td>variable credit*</td>
</tr>
<tr>
<td>BNFO 492 Independent Study</td>
<td>variable credit*</td>
</tr>
<tr>
<td>BNFO 497 Research and Thesis (WI)</td>
<td>variable credit*</td>
</tr>
<tr>
<td>CHEZ 301 Organic Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td>CHEZ 302 Organic Chemistry Laboratory II</td>
<td>2</td>
</tr>
<tr>
<td>HGEN/BIOL 516 Population Genetics</td>
<td>3</td>
</tr>
<tr>
<td>MICR 515 Principles of Molecular Microbiology</td>
<td>3</td>
</tr>
</tbody>
</table>

* May be taken only with adviser’s permission.

### Computational track

**Required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 302 Introduction to Discrete Structures</td>
<td>3</td>
</tr>
<tr>
<td>CMSC 355 Program Design</td>
<td>3</td>
</tr>
<tr>
<td>CMSC 401 Algorithm Analysis with Advanced Data Structures</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BNFO 440 Computational Methods in Bioinformatics</td>
<td>3</td>
</tr>
<tr>
<td>BNFO 491 Special Topics in Bioinformatics</td>
<td>variable credit*</td>
</tr>
<tr>
<td>BNFO 492 Independent Study</td>
<td>variable credit*</td>
</tr>
<tr>
<td>BNFO 497 Research and Thesis</td>
<td>variable credit*</td>
</tr>
<tr>
<td>CMSC 409 Artificial Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>CMSC 411 Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CMSC 502 Parallel Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

CMSC 508 Database Theory
CMSC 591 Topics in Computer Science

* May be taken only with adviser’s permission.

### Quantitative/statistical track

**Required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 201 Calculus with Analytic Geometry</td>
<td>4</td>
</tr>
<tr>
<td>MATH 307 Multivariate Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MATH 310 Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>STAT 321 Introduction to Statistical Computing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS/STAT 513 Mathematical Statistics I</td>
<td>3</td>
</tr>
<tr>
<td>BIOS/STAT 514 Mathematical Statistics II</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 524 Biostatistical Computing</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 553-554 Applied Statistics or STAT/BIOS/EPID 543, 544</td>
<td>6</td>
</tr>
<tr>
<td>Statistical Methods I, II</td>
<td></td>
</tr>
<tr>
<td>BIOS 546 Linear Models</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 591 Special Topics: Applied Data Mining</td>
<td>3</td>
</tr>
<tr>
<td>BNFO/MATH/BIOL 380 Introduction to Mathematical Biology</td>
<td>variable credit*</td>
</tr>
<tr>
<td>BNFO 491 Special Topics in Bioinformatics</td>
<td>variable credit*</td>
</tr>
<tr>
<td>BNFO 492 Independent Study</td>
<td>variable credit*</td>
</tr>
<tr>
<td>BNFO 497 Research and Thesis</td>
<td>variable credit*</td>
</tr>
<tr>
<td>STAT/MATH 309 Introduction to Probability Theory</td>
<td>3</td>
</tr>
<tr>
<td>STAT 421 Computational Issues in Statistical Science</td>
<td>3</td>
</tr>
<tr>
<td>STAT 541 Applied Statistics for Engineers and Scientists</td>
<td>3</td>
</tr>
</tbody>
</table>

* May be taken only with adviser’s permission.

### Bioinformatics, accelerated bachelor’s to master’s

The accelerated bachelor’s to master’s program in bioinformatics permits selected students majoring in bioinformatics to earn the Bachelor of Science and master’s degrees in a minimum of five years by taking certain graduate level courses during the senior year of their undergraduate program. The program is restricted to students with strong credentials and a clear interest in a career in the field of bioinformatics.

### Admission requirements and procedures

#### Regular admission

In order to be admitted formally into the program through the regular admissions process, a student must be a VCU bioinformatics major, must have completed 90 semester credit hours with an overall GPA of at least 3.0, including a substantial amount of collateral and core course work within the major and evidence of strong academic achievement. An application must be submitted to the Graduate School.

Applicants should indicate which master’s degree program (Master of Science in Bioinformatics or Master of Bioinformatics) is of interest to them. Applications will be screened by the Bioinformatics Admissions Committee. Most students will be able to initiate the application process during the second semester of their junior year. Students provisionally accepted into the program will be notified in time to register for courses as accelerated students but will not be formally admitted into the program until they have completed all requirements listed above.

Following acceptance into the accelerated program, students must continue to meet the requirements stated above throughout the senior year, as well as the graduate student standards of performance specified in this Bulletin in order to be awarded formal acceptance into the graduate program, which typically takes place just prior to the fall semester of the fifth year.

#### Guaranteed admission

The bioinformatics master’s program participates in the Honors College Guaranteed Admission Program. This program allows highly qualified high school seniors who will be participating in the VCU Honors College to gain admission into selected VCU graduate programs without competing for that admission at a later date. In order to apply for guaranteed admission, the student must have obtained a combined score of 1190, in a single sitting, on the SATI, with neither score below 530, and have achieved a minimum 3.5 unweighted GPA (4.0 scale).

Once accepted into the Guaranteed Admission Program, bioinformatics students must fulfill the requirements of the Honors College for graduation with University Honors, maintain a cumulative GPA of 3.5, progress satisfactorily in honors courses and meet course requirements of the bioinformatics graduate program in

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order to remain exempt from competing for admission into the master’s program. Guaranteed admission applicants will be screened by the Bioinformatics Admissions Committee.

### Shared credits for accelerated program

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>*BNFO 620 (Bioinformatics Practicum) or BNFO 508 (Introduction to Bioinformatics Research) replaces BNFO 420 (Applications in Bioinformatics) for the M.Biof. and M.S., respectively</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>Course work taken to meet master’s cross-track requirements replaces undergraduate program electives.</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>A graduate course within the track replaces a BS-track required (if approved by adviser) or elective course.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total shared credits</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

* For accelerated program students, BNFO 620 or BNFO 508 replaces BNFO 420 to meet the "oral communication" general education requirement.
Administration
F. Douglas Boudinot
Dean, Graduate School

Undergraduate students in graduate classes

VCU undergraduates may enroll in 500-level courses with approval of their advisers and consent of the programs offering the courses. Highly qualified undergraduates approaching the last semester of study may apply for admission to a graduate program. If accepted, they may enroll in two 600-level graduate courses during the last semester of undergraduate study. Permission to enroll as an undergraduate in 600-level graduate courses must be obtained from the undergraduate academic adviser and the Graduate School. The total load should not exceed 16 hours of combined credit. Credit for any course is applicable toward only one degree unless a student is admitted to a course of study that allows a defined number of shared courses.
Virginia Commonwealth University currently offers more than 60 undergraduate programs in fields ranging from the arts and humanities to science and engineering to business and education. The University Undergraduate Curriculum Committee performs major coordination among these programs through review of proposed curricular revisions, deletions and additions. Chaired by the vice provost for academic affairs, the committee’s voting membership comprises two elected faculty members from each academic unit that offers undergraduate degree programs.

Admission to the university
Office of Undergraduate Admissions
821 West Franklin Street
P.O. Box 842526
Richmond, Virginia 23284-2526
(804) 841-3638, (804) 828-1222
Fax: (804) 828-1899
E-mail: ugrad@vcu.edu
www.ugrad.vcu.edu
Sybil Halloran, Director

VCU Welcome Center
West Broad Street Parking Deck
1111 West Broad Street
Richmond, Virginia 23284-2526
(804) 827-2000
www.ugrad.vcu.edu/visitvcu/campustours.html

Office of Records and Registration
Harris Hall
1015 Floyd Ave.
P.O. Box 842520
Richmond, Virginia 23284-2520
(804) 828-1341, (804) 828-1349
Fax: (804) 828-2573
E-mail: rar@vcu.edu
www.enrollment.vcu.edu/rar

Anjour Harris, University Registrar and Director

General policy governing admission and enrollment
As a comprehensive, metropolitan, public institution, Virginia Commonwealth University seeks to provide excellent higher education for those who will profit from an intellectually challenging experience. The university encourages applications from people who are sincere in their desire to study in an environment where excellence in teaching, research, scholarly activities and community services is stressed. In addition, VCU encourages applications from returning adult students whose education may have been interrupted.

Recognizing the value of a diverse student body, the university invites applications from all qualified persons without regard to age, race, color, national origin, gender, religion, sexual orientation, veteran’s status, political affiliation or disability. Although the university has a primary responsibility to educate Virginia residents, the value and contribution of a diverse student body is recognized and the enrollment of students from other states and countries is encouraged. Entrance requirements are in full compliance with all applicable federal and state statutes, rules and regulations.

All people admitted to and enrolled in the university are classified as either degree-seeking or nondegree-seeking students. Degree-seeking students are presumed to be working toward a degree in approved educational programs, while nondegree-seeking students are permitted to enroll in classes on a semester basis. Recognizing a commitment to educate students who wish to take courses primarily for self improvement or to continue lifelong education, the university also encourages the enrollment of nondegree-seeking students. The university enrolls as many qualified degree-seeking and nondegree-seeking students as resources permit. When resources are limited, spaces go to those who present credentials showing the greatest potential for academic success in degree programs.

The Board of Visitors establishes general admission policies on the recommendation of the university administration. Admission criteria and policies are recommended by the Undergraduate and Graduate Admissions offices as well as the deans of the schools and colleges of the university on the advice of their faculties. Entrance requirements for schools and the colleges within the university may differ. Various departments may have unique admission requirements, such as examinations, auditions, portfolios, interviews, licensure or language proficiency, in order to evaluate a student’s potential for success in selected programs and courses. The university selects applicants who present the strongest qualifications in scholastic achievement and potential, standardized examinations, and through the review of other evidence of potential including strength of character. Each applicant is reviewed on an individual basis.

Admission guidelines
Freshman undergraduate admission guidelines
Nondegree-seeking student guidelines
Evening studies
School of the Arts freshman admission guidelines
Transfer students

The credentials of undergraduate applicants for admission to degree status are reviewed on an individual basis. Because the number of applicants who meet the requirements for admission may exceed the number that can be admitted, the university selects those candidates who present the strongest qualifications in scholastic achievement and potential as reflected on transcripts and test scores. Applicants interested in enrolling as nondegree-seeking students should read the Nondegree-seeking student guidelines section, which appears in the “Academic Regulations and General Degree Requirements” section of this bulletin.

Freshman undergraduate admission guidelines
An applicant for degree status must be a graduate of an accredited secondary school (or its equivalent) or hold a GED certificate with adequate scores, defined as a composite score of at least 550 on the GED battery. A high school student should submit an application for admission after completion of the junior year, unless applying for the Early Admission or Advanced Scholar programs, in which case the application should be submitted after the sophomore year.

All freshman applicants under the age of 22 are required to submit scores from the SAT or ACT.

For admission to the College of Humanities and Sciences (including the schools of Government and Public Affairs, Mass Communications and World Studies) or the schools of Business, Education, Engineering or Social Work, at least 20 high school units are required, with the following minimum distribution of subjects: four units in English; three units in mathematics, one of which must be algebra I and one of which must be geometry or algebra II; three units in science, one of which must be a laboratory science; and three units of history or social sciences or government. Students are encouraged to present at least three units in a modern or ancient language or two units of two foreign languages.

In addition, preference is given to candidates who submit the Advanced Studies Diploma or its equivalent. This diploma requires four units in English; four in social sciences, including U.S. and Virginia history, U.S. and Virginia government, and two courses in either world history or geography or both; four units in mathematics (algebra I, geometry and algebra II); four units in science drawn from earth science, biology, chemistry, physics or other advanced science courses; and either three units of one foreign language or two units of two foreign languages; two units in health and physical education; one unit of fine arts or practical arts; and one unit in economics and personal finance.

Freshman applicants planning to pursue a major in the health sciences (clinical laboratory sciences, clinical radiation sciences, dental hygiene, dentistry, medicine, nursing, occupational therapy, pharmacy and physical therapy) are advised to apply to the preprofessional programs of their choice through the University College.

The Honors College offers qualified students interested in health science the opportunity for early acceptance into many of the MCV Campus programs. See the Honors College section of the Bulletin for details.

Freshman applicants who are not admitted with degree status may be eligible to enroll at VCU as nondegree-seeking students provided one year has elapsed since their actual or intended high school graduation date.

Nondegree-seeking student guidelines
Eligibility guidelines for nondegree-seeking students may be found in the “Academic Regulations and General Degree Requirements” section of this bulletin.
Evening studies
Details of registration and credit earned for evening studies is included in the “Academic Regulations and General Degree Requirements” section of this bulletin.

School of the Arts freshman admission guidelines
Students applying to the School of the Arts must submit the standard university undergraduate application in addition to supplemental materials. The School of the Arts faculty reviews all applications to programs in the School of the Arts. All visual arts and design applicants and all technical theatre applicants are required to submit a visual portfolio with their application. All performing arts applicants are required to visit VCU for an audition and/or interview. For additional supplemental requirements and online application materials, visit the School of the Arts Web site at www.vcu.edu/arts/apply.

Transfer students
Transfer students should review the Admission guidelines for transfer students of this bulletin.

International student admissions
VCU encourages qualified international students, both immigrant and nonimmigrant, to seek admission to the university. See the International Admissions area of the Office of International Education section of this bulletin for guidelines.

Admission procedures
It is the responsibility of the applicant to ensure that all required admission documents are forwarded to the Office of Undergraduate Admissions before the deadline. (Refer to the freshman application deadlines or transfer application deadlines.)

Applications and supporting credentials for undergraduate programs offered on both campuses must be submitted to the Office of Undergraduate Admissions. All applications and supporting documents become the property of the university and are not returned to the applicant. After all required documents have been received, candidates are notified in writing of the decision by the appropriate admissions office. The following must be submitted to the Office of Undergraduate Admissions when applying for an undergraduate degree program:

1. Official application form. Candidates seeking admission or readmission to the university in an undergraduate degree program must file an official Application for Undergraduate Admission before the specified deadline. Students planning to complete a second baccalaureate degree also must submit this application. Students are strongly encouraged to apply to the university using the electronic application. Students who apply electronically will be able to check their application status online to be sure we have received all required materials (admission decisions are not provided online). Care should be taken to read the admissions guidelines in this bulletin, to follow the directions accompanying the application and to complete all information requested. Incomplete or incorrect applications will result in a processing delay.

2. Application fees. Application fees are nonrefundable and should be submitted via credit card (available only if applying online) or by check or money order with the application for admission. Do not send cash. For current application fees, you should see the Office of Undergraduate Admissions Web site.

   The application fee is nonrefundable. Applications may not be processed if submitted without a fee or the applicant will be billed. Students currently enrolled in programs on the VCU Monroe Park Campus who are applying to undergraduate programs on the MCV Campus are not required to remit the application fee.

3. Official transcript(s). Freshman applicants are required to submit their official high school transcript(s) showing course work completed to date. The secondary school record should contain courses and grades earned, rank in class and overall GPA. A final transcript also is required showing date of graduation, overall GPA and rank in graduating class if available.

Transfer candidates must request the registrar of each college attended to send an official transcript of their course work. Transfer candidates who have earned fewer than 30 semester credits/45 quarter credits also must submit their secondary school records. Priority application review will be given to applicants who have completed at least 30 credits at their former institution(s) and who apply and submit all required documentation by the recommended application deadline.

Applicants to the School of Nursing undergraduate program on the MCV Campus must submit official transcripts from all colleges, universities and hospital schools/programs attended.

For readmission candidates, the Office of Undergraduate Admissions will obtain the student’s VCU transcript. Applicants who have attended other colleges since leaving VCU must request the registrar of each college to send official transcripts to the Office of Undergraduate Admissions

4. Test scores. Freshman applicants (high school graduates and GED holders) 21 years of age or younger must submit SAT or ACT scores and, if applicable, an official copy of their GED scores.

   Transfer applicants 21 years of age or younger and with fewer than 30 semester/45 quarter credits of college work must submit SAT or ACT scores.

   School of Nursing applicants, except those applying to the R.N.-B.S. program, must submit SAT, ACT or GRE scores regardless of age.

   Foreign applicants whose native language is other than English must submit scores for the Test of English as a Foreign Language, in addition to any other test scores required. In general, VCU requires a minimum score of 550 on the paper TOEFL, 213 on the computer TOEFL or 80 on the Web-based TOEFL, but some programs may require a higher TOEFL score. Some MCV Campus programs also may require Test of Written English or Test of Spoken English scores.

5. Supplemental application requirements. School of the Arts applicants must submit supplemental materials as described online at www.vcu.edu/arts/apply.

   Applicants to all undergraduate programs on the MCV Campus must submit supplemental application materials as described online at www.ugrad.vcu.edu/apply/apply_mcvcampus.html.

6. Immunization requirements. Virginia law requires all full-time students to submit an official certification of immunization to University Student Health Services prior to registration. Detailed information on immunization requirements can be found in the “Division of Student Affairs and Enrollment Services” section of this bulletin.

   Note that some MCV Campus programs may require additional immunizations because of high patient contact.

Freshman application deadlines
Program-specific application deadlines for freshmen are available on the Office of Undergraduate Admissions Web site at www.ugrad.vcu.edu/admissions101/freshman/deadlines.html.

Admission notification
Freshman applicants accepted to the university for the fall semester are notified by letter of the conditions of their acceptance by April 1 if they meet the Jan. 15 recommended deadline. Freshman applicants who apply under the regular admission process may receive early notification of their acceptance if they present exceptional admission credentials. Transfer applicants to programs on the Monroe Park Campus will be notified of an admission decision on a rolling basis.

Information on advisement and registration procedures, the immunization form, and housing information is included with the acceptance letter. Virginia requires that all full-time students enrolling for the first time in any state institution of higher education furnish an immunization record from a qualified licensed physician. New VCU students must submit their immunization form to University Student Health Services.

When an applicant is tentatively accepted to the university, a final transcript is required to complete the individual’s admission file. If the official transcript is not received by the end of the fourth week of classes of the semester for which the student was accepted, an administrative hold will be placed on future registrations until the credentials are received establishing the student’s eligibility.
The university reserves the right to rescind offers of admission if the final documents indicate that the applicant no longer satisfies the entrance requirements upon which acceptance was granted.

**Responding to the offer of admission**

Fall freshman applicants accepted to the university by April 1 must notify the Office of Undergraduate Admissions of their intent to enroll or not to enroll by May 1. Fall freshman applicants, if accepted after April 1, must notify the university within two weeks of receiving their notification of admission.

Fall transfer applicants accepted to programs on the Monroe Park Campus must notify the Office of Undergraduate Admissions of their intent to enroll by July 1 or two weeks after receiving their letter of admission. Fall applicants to the health sciences programs must respond within the time frame listed on their acceptance letters as determined by the individual department. All students accepted for the spring semester must respond to the offer of admission within two weeks of receiving their notification of admission.

When accepting the offer of admission, all immunization records should be sent to University Student Health Services.

A nonrefundable deposit is required of all applicants who accept VCU’s offer of admission. The deposit is credited to the student’s account with the university and is not refundable to a future semester. Students experiencing economic hardships may request a waiver of deposit by providing a copy of their Student Aid Report (SAR) along with their response form. The decision to grant a waiver is based on information submitted to the university on the student’s Free Application for Federal Student Aid.

Students who defer their acceptance to a later semester forfeit their initial tuition deposit and must submit a second deposit for the semester in which they choose to enroll.

**Admission guidelines for transfer students**

**University undergraduate transfer policy**

**State policy on transfer agreement**

Virginia Commonwealth University/Virginia Community College System Guaranteed Admission Agreement with Teacher Education Provision Admission

Transfer applicants are considered for admission provided they present evidence of good standing at the last institution attended; and to be competitive they should present a minimum cumulative GPA of 2.25 (2.5 preferred) from all accredited institutions to be considered for admission to VCU. Priority application review will be given to applicants who have completed at least 30 credits at their former institution(s). Candidates with fewer than 30 semester (45 quarter) hours also will be reviewed on the basis of their high school performance and SAT/ACT scores (if younger than the age of 22). Transfer candidates who have completed fewer than 30 semester credits/45 quarter credits and who are 21 years of age or younger must submit SAT or ACT results and also must meet specific guidelines listed in the Freshman undergraduate admission guidelines section of this chapter.

The undeclared major is not open to students with 60 or more college credits. Transfer applicants will be notified of an admissions decision on a rolling basis until the class is filled. Priority application review will be given to students who apply and submit all required documentation by the recommended application deadline.

Some programs have additional requirements for admission as a transfer student. Transfer applicants should consult the appropriate area of this bulletin or the departmental Web site for admission requirements.

Transfer applicants who are not admitted with degree status may be eligible to enroll as nondegree-seeking students as determined by the Office of Undergraduate Admissions.

Transfer applicants ineligible to return to a former institution because of an academic suspension may not enroll at VCU for a period of one year for the first suspension and five years for the second suspension.

Transfer applicants who have been suspended from another institution for nonacademic or disciplinary reasons are referred to the Office of the Vice Provost for Student Affairs and Enrollment Services for preadmission clearance.

Additional information for transfer students is available in the VCU Transfer Guide or on the Web at www.ugrad.vcu.edu/admissions101/transfer.

**University undergraduate transfer policy**

All credits taken at regionally accredited institutions that meet the VCU transfer requirements may be posted to the VCU transcript. However, there may be a difference between the credits VCU will post and the credits each VCU department/school will apply to the desired degree program. Students should meet with their program advisers, who will assist them in determining their VCU degree requirements and will advise them on what transfer courses the program specifically will apply toward their degree requirements. Regardless of how many transfer credits are accepted, students must satisfy all VCU graduation requirements noted in the graduation checklist, including the following:

- Completion of at least 25 percent of the semester-hour credits required for their bachelor’s degree program at VCU

**State policy on transfer agreement**

VCU welcomes applications from Virginia community colleges and Richard Bland students who have earned the associate in arts, associate in science, or associate in arts and sciences degrees, or approved A.A.S. or A.S. programs in general studies (see number 8). Students holding these degrees will have junior standing and, as long as they have earned at least a C grade in all the transferable courses, will be considered to have met all lower-division general education requirements for Monroe Park Campus programs with the exception of certain lower-level and upper-level program requirements that also apply to native students. Students should closely follow the detailed course suggestions offered in the VCU Transfer Guide for Virginia Community Colleges and Richard Bland College. By selecting certain courses to fulfill requirements within the three associate degree programs, additional lower-division courses needed after transfer to VCU can be held to a minimum.

Additionally:

- Students must make proper application for admission to VCU.

- Only courses with grades of C or higher are transferable.

- Credits needed to meet major prerequisites will be based on the Course Equivalency Guide or agreements resulting from program-to-program transfer agreements.

- Students will not be required to repeat courses that have been satisfactorily completed at a Virginia community college except in cases where special restrictions apply to all students.

- Applicants to degree programs that are competitive are not guaranteed admission but will be evaluated on the same basis as native students.

For students with any of the associate degrees from a VCCS institution or Richard Bland College, VCU degree requirements in effect at the date of the student’s admission to the VCCS or RBC associate degree program will be used in certifying the student for graduation if the student has not interrupted his or her associate degree more than two consecutive semesters (excluding summer sessions).

Requirements of native students which would apply to associate-degree holders are:

1. **English requirements**: The core education program writing requirement at VCU includes UNIV 111 Focused Inquiry I, UNIV 112 Focused Inquiry II and UNIV 200 Writing and Rhetoric Workshop. Virginia community college students who have taken ENG 111 and earned at least a C grade receive credit for UNIV 112 and are required to take UNIV 200; those students are exempted from UNIV 111. Students who successfully complete ENG 111 and 112 at the community college with at least a C grade in both classes have fulfilled all core education program writing requirements (UNIV 111, 112 and UNIV 200) at VCU.

For associate degree holders, completion of ENGL 101 and 102 at RBC with at least a C grade in both classes will fulfill the UNIV 111, 112 and UNIV 200 requirement. For RBC students who transfer without an associate degree, ENGL 101 at RBC=UNIV 112 at VCU; ENGL 102 at RBC=ENGL 215 at VCU; and ENGL 200 at RBC=UNIV 200 at VCU.

2. All bachelor’s degree programs in the College of Humanities and Sciences require competency through the elementary level of a foreign language; some
majors require competency through the intermediate level.

3. Mathematics/statistics: All bachelor’s degree programs in the College of Humanities and Sciences have mathematics/statistics requirements that must be met. See specific program for required courses and their equivalents.

4. The School of Social Work requires a 2.5 GPA for admission to upper-level courses. The School of Business requires a 2.25 GPA (except for the Department of Information Systems, which requires a 2.75 GPA) for admission to upper-level course work. The School of Mass Communications requires a 2.5 GPA for admission to upper-level work.

For students pursuing careers in early or secondary education through the Extended Teacher Preparation Program of the College of Humanities and Sciences and the School of Education, a 2.8 GPA and successful completion of the Praxis I examination are required for entry into Teacher Preparation, a stage in the program after the student has completed at least 60 credits.

For students applying to majors in the School of the Arts, a portfolio evaluation for visual arts applicants and an audition for performance applicants are required.

5. The professional baccalaureate programs within the schools of Social Work, Nursing and Allied Health Professions, the Dental Hygiene Program in the School of Dentistry, and the doctoral programs in physical therapy and pharmacy have specific program-related lower-level requirements that must be completed to apply to and enter health sciences programs and to achieve success in the programs, if admitted.

The health, physical education and exercise science programs have specific lower-level requirements related to state-approved program status, professional certification and entry into the practicum sequence. Specified science courses are prerequisite for entry into upper-level kinesiology and exercise science courses. While some flexibility is available in the transfer of some other courses into the lower-level part of the programs, the first two years of the health, physical education and exercise science programs are not traditional general education as mentioned in the previous paragraphs.

6. Transfer work from some occupational or technical programs is reviewed under specific conditions for the Bachelor of Interdisciplinary Studies program and the special program in nursing for community college R.N.-degree holders who wish to complete the Bachelor of Science in Nursing.

7. Students wishing to transfer to the School of Engineering must have a 3.0 GPA with no grades below a C. Also, B grades or better must be attained in mathematics, science or engineering courses to be considered for transfer. Transfer students from the VCCS will follow existing articulation agreements.

8. The A.A.&S. and A.S. programs in general studies are considered transfer degrees by VCU.

9. Senior capstone experience: All bachelor’s degree programs require the completion of a senior capstone experience within the major as part of the VCU core curriculum.

10. Detailed information about the Transfer Module and Virginia Community College/VCU and Richard Bland College/VCU transfer-equivalent courses is available on the Web at www.ugrad.vcu.edu/admissions101/transfer.

Virginia Commonwealth University/Virginia Community College System Guaranteed Admission Agreement with Teacher Education Provision Admission

The VCU GAA-TEPA in the area of an arts and sciences core leads to a transferable associate degree (A.A.&S., A.A. or A.S.) that will facilitate entry into a PK-6 teacher education program. In addition, a student must earn at least a 2.8 GPA at VCU and have passed Praxis I before formal admission to the teacher preparation program.

Transfer application deadlines

Program-specific application deadlines for transfer students are available on the Office of Undergraduate Admissions Web site at www.ugrad.vcu.edu/admissions101/transfer/deadlines.html.

Evaluation of transfer credit

An evaluation of transferable credits for applicants to both Monroe Park Campus and MCV Campus programs is made by the Transfer Center (or appropriate program) after the accepted applicant’s final transcript has been received by the Office of Undergraduate Admissions.

Accepted transfer credit contributes to hours earned and toward fulfillment of degree requirements at VCU. The grades of accepted transfer courses are recorded as TR on the student’s VCU transcript, and hours attempted and quality points earned are not recorded. Accepted transfer credits are not included in the transfer student’s overall GPA at VCU. However, calculation of the GPA requirement for admittance into the School of Business advanced program considers grades earned at all institutions attended. The GPA for fulfillment of VCU degree requirements is computed only from courses taken at VCU. The grades and quality points of transfer courses are evaluated in the computation determining graduation honors. Accepted quarter-hour credits recorded on the VCU transcript are converted to semester-hour credits.

Credits earned at other institutions carrying a grade of “D” are not accepted for transfer Courses taken on the “pass/fail” or “pass/no pass” systems or courses taken for grades of “satisfactory” or “unsatisfactory” that receive earned credits and a “satisfactory” grade (or comparable passing grade) from the transfer institution receive equivalent semester credit. Transfer credits graded as “pass/fail” will not be included in the computation for determination of academic honors at VCU.

Degree candidates must complete 30 of the last 45 credit semester hours required for their bachelor’s degree program at this institution. Attainment of the college/department minimum GPA and any other standard requirements is required of all students, including, in the case of the School of the Arts, a portfolio evaluation for visual arts applicants and an audition for performing arts applicants. Applicants to degree programs that are competitive are not guaranteed admission but will be evaluated on the same basis as currently enrolled VCU students.

Students who have earned the A.A., A.S. or A.A.&S. degree from a VCCS institution or Richard Bland College should refer to the articulation agreement information in this bulletin.

Students from VCCS institutions, Richard Bland College or other two-year institutions who have not completed the college parallel A.A., A.S. or A.A.&S. degree will have the exact designation of their status determined after an evaluation of acceptable credits. This evaluation is determined by the equivalencies shown in the VCU Transfer Guide for Virginia Community Colleges and Richard Bland College that may be accepted, including not more than 50 percent in the major field of study. However, the applicant should realize that more than two additional years may be necessary to complete the degree requirements in certain curricula.

Credits earned in community college occupational or technical programs will be judged on their own merits to determine their applicability toward VCU degree requirements. In addition, many accredited institutions offer correspondence courses, which may be considered for transfer credit.

Additional sources of academic credit

Before the end of the first semester of enrollment, dual-enrollment transcripts and scores for the Advanced Placement test of the College Entrance Examination Board, International Baccalaureate Diploma or Cambridge International Examination are required to be submitted to the appropriate VCU offices to be eligible for academic credit.

Credit for Advanced Placement tests
Credit for International Baccalaureate Diplomas and courses
Credit for Cambridge International Examinations
College Level Examination Program
Undergraduate credit by examination
Military service and ROTC courses
Credits earned through the International Student Exchange Program
Credit for dual-enrollment courses

Note: The Virginia Commonwealth University Board of Visitors gives the University Undergraduate Curriculum Committee the authority to review these sources of academic credit as needed. The UUCC will report substantial changes to the board for further approval.

Credit for Advanced Placement tests of the College Entrance Examination Board

AP tests passed with scores of 3, 4 or 5 will, depending on the test, be considered for advanced standing and credit for the corresponding courses at Virginia Commonwealth University. The chart below provides information about the VCU equivalent credit for the various AP tests.

To ensure consistency, the Office of the Vice Provost for Instruction is the official credit notification point for AP credit for all university programs. Final determination of credit will be made after test results have been received and evaluated by the vice provost’s office. Credits awarded are counted as credits earned toward the degree, but are not used in the computation of the student’s VCU grade-point average.

For more information, contact the Office of the Vice Provost for Instruction at (804) 827-0838.

### Credit for Advanced Placement Tests of the College Entrance Examination Board

<table>
<thead>
<tr>
<th>AP examination</th>
<th>AP score</th>
<th>VCU equivalent</th>
<th>VCU credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>3</td>
<td>ARTH 103</td>
<td>3</td>
</tr>
<tr>
<td>Art History</td>
<td>4,5</td>
<td>ARTH 103, 104</td>
<td>6</td>
</tr>
<tr>
<td>Art – Studio</td>
<td>4,5</td>
<td>ARTF 139</td>
<td>1</td>
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<tr>
<td>Art – 2-D-Design</td>
<td>4,5</td>
<td>ARTF 139</td>
<td>1</td>
</tr>
<tr>
<td>Art – 3-D-Design</td>
<td>4,5</td>
<td>BIOL 101, BIZ O 101</td>
<td>4</td>
</tr>
<tr>
<td>Biology</td>
<td>3</td>
<td>BIOL 101, BIZ O 101</td>
<td>4</td>
</tr>
<tr>
<td>Biology</td>
<td>4</td>
<td>BIOL 152, BIZ O 152</td>
<td>4</td>
</tr>
<tr>
<td>Biology</td>
<td>5</td>
<td>BIOL 151, BIZ O 151, BIZ O 152</td>
<td>8</td>
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<tr>
<td>Calculus AB</td>
<td>3,4,5</td>
<td>MATH 200</td>
<td>4</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>3,4</td>
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</tr>
<tr>
<td>Calculus BC</td>
<td>5</td>
<td>MATH 200, 201</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry</td>
<td>3,4</td>
<td>CHEM 101, CHEZ 101</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5</td>
<td>CHEM 101, CHEZ 101, CHEM 102, CHEZ 102</td>
<td>8</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>4,5</td>
<td>CMSC 255</td>
<td>4</td>
</tr>
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</table>

| Computer Science AB | 4,5 | CMSC 255, 256 | 7          |
| Economics – Macro | 4,5 | ECON 211       | 3          |
| Economics – Micro | 4,5 | ECON 210       | 3          |
| English Language and Composition | 3,4,5 | UNIV 111 | 3          |
| or English Literature and Composition | 3,4,5 | UNIV 111, ENGL 215 | 6          |
| Environmental Science | 3,4 | BIOL 103       | 4          |
| Environmental Science | 5 | BIOL 103       | 5          |
| European History | 3,4,5 | HIST 101, 102 | 6          |
| French, German, Spanish Language | 3 | FREN, GRMN, SPAN 202 | 3          |
| French, German, Spanish Language | 4 | FREN, GRMN, SPAN 300 | 3          |
| French, German, Spanish Language | 5 | FREN, GRMN, SPAN 300, 301 | 6          |
| French, German, Spanish Literature | 3 | FREN, GRMN, SPAN 202 | 3          |
| French, German, Spanish Literature | 4 | FREN, GRMN, SPAN 330 | 3          |
| French, German, Spanish Literature | 5 | FREN, GRMN, SPAN 330, 331 | 6          |
| Govt. & Politics: Comparative | 3,4,5 | POLI 109 | 3          |
Credit for International Baccalaureate Diplomas and courses

IB Higher Level (HL) tests passed with scores of 3-7 and Standard Level (SL) tests passed with scores of 4-7 will, depending on the test, be considered for advanced standing and credit for the corresponding courses at Virginia Commonwealth University. The chart below provides information about the VCU equivalent credit for IB scores. Three elective credits will be awarded for the “Theory of Knowledge” course.

To ensure consistency, the Office of the Vice Provost for Instruction is the official credit notification point for IB credit for all university programs. Final determination of credit will be made after test results have been received and evaluated by the vice provost’s office. Credits awarded are counted as credits earned toward the degree, but are not used in the computation of the student’s VCU grade-point average.

For more information, contact the Office of the Vice Provost for Instruction at (804) 827-0838.

Credit for International Baccalaureate Diplomas and courses

<table>
<thead>
<tr>
<th>IB examination</th>
<th>HL</th>
<th>SL</th>
<th>VCU equivalent</th>
<th>VCU credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>4,5</td>
<td>5,6</td>
<td>BIOL 101, BIOZ 101</td>
<td>4</td>
</tr>
<tr>
<td>Business &amp; Management</td>
<td>4,5,6,7</td>
<td>5,6,7</td>
<td>MGMT 121</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry</td>
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<td></td>
<td>CHEM 101, CHEZ 101</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry</td>
<td>6,7</td>
<td>7</td>
<td>CHEM 101, CHEZ 101, CHEM 102</td>
<td>8</td>
</tr>
<tr>
<td>Computer Science</td>
<td>4,5</td>
<td>5,6</td>
<td>CMSC 255</td>
<td>4</td>
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<tr>
<td>Computer Science</td>
<td>6,7</td>
<td>7</td>
<td>CMSC 255, 256</td>
<td>7</td>
</tr>
<tr>
<td>Economics</td>
<td>6,7</td>
<td>7</td>
<td>ECON 203</td>
<td>3</td>
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<tr>
<td>English A</td>
<td>4,5,6,7</td>
<td>5,6,7</td>
<td>UNIV 111</td>
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<tr>
<td>English B</td>
<td>4,5,6,7</td>
<td>5,6,7</td>
<td>UNIV 111</td>
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<td>Environmental Systems</td>
<td>5,6,7</td>
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<td>GEOG 203, GEOZ 203</td>
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<tr>
<td>French, German, Spanish</td>
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<td>5</td>
<td>FREN, GRMN, SPAN 102</td>
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<tr>
<td>French, German, Spanish</td>
<td>4,5</td>
<td>5</td>
<td>FREN, GRMN, SPAN 202</td>
<td>3</td>
</tr>
<tr>
<td>French, German, Spanish</td>
<td>5,6</td>
<td>6</td>
<td>FREN, GRMN, SPAN 300</td>
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<tr>
<td>French, German, Spanish</td>
<td>6,7</td>
<td>7</td>
<td>FREN, GRMN, SPAN 300, 301</td>
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<tr>
<td>Further Mathematics</td>
<td>4,5,6,7</td>
<td>5,6,7</td>
<td>MATH 141</td>
<td>3</td>
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<tr>
<td>Geography</td>
<td>4,5,6,7</td>
<td>5,6,7</td>
<td>GEOG 102</td>
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<tr>
<td>Higher Mathematics</td>
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<td>5</td>
<td>MATH 141</td>
<td>3</td>
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<tr>
<td>Higher Mathematics</td>
<td>5,6</td>
<td>6</td>
<td>MATH 200</td>
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<tr>
<td>History</td>
<td>4,5,6,7</td>
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<tr>
<td>History Americas</td>
<td>4,5,6,7</td>
<td>5,6,7</td>
<td>HIST 103, 104</td>
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<td>History Asia &amp; Oceania</td>
<td>4,5,6,7</td>
<td>5,6,7</td>
<td>HIST 107, 108</td>
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<td>History Europe</td>
<td>4,5,6,7</td>
<td>5,6,7</td>
<td>HIST 101, 102</td>
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<tr>
<td>Latin</td>
<td>3</td>
<td>4</td>
<td>LATN 101</td>
<td>4</td>
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<tr>
<td>Latin</td>
<td>4,5</td>
<td>5</td>
<td>LATN 102</td>
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</tr>
<tr>
<td>Latin</td>
<td>5,6,7</td>
<td>6,7</td>
<td>LATN 202</td>
<td>3</td>
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<tr>
<td>Mathematical Methods</td>
<td>5,6,7</td>
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<td>MATH 151</td>
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<tr>
<td>Mathematical Studies</td>
<td>4,5,6,7</td>
<td></td>
<td>MATH 141</td>
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<tr>
<td>Music</td>
<td>4,5,6,7</td>
<td>5,6,7</td>
<td>MHIS 105</td>
<td>3</td>
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<tr>
<td>Philosophy</td>
<td>5,6,7</td>
<td>6,7</td>
<td>PHIL 101</td>
<td>3</td>
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<tr>
<td>Physics</td>
<td>4,5</td>
<td>5,6</td>
<td>PHYS 201</td>
<td>4</td>
</tr>
</tbody>
</table>
Students should return the completed CLEP approval forms, the completed MATH 200 A-level VCU. CLEP credit is officially awarded only to students who are fully accepted into VCU. The applicability of such credit toward the student’s degree program is interpreted by the department or school in which the student seeks a degree. Credits accepted are counted as credits earned toward the degree, but are not used part, or full, any VCU course or combination of courses that the student has already completed or enrolled in for credit. For example, a student who has completed courses in U.S. and European history, sociology, anthropology and psychology, or similar courses, is not eligible to take the social sciences and history general examination. The dean’s office of the school in which the student is a major makes the decision about the appropriateness of taking a particular examination.

If a student has earned CLEP subject examination credit, the student may not take a VCU course for credit that would duplicate the CLEP credits already earned.

1. CLEP credit is officially awarded only to students who are fully accepted into a VCU degree program.

2. A student may not attempt a subject or general examination if it duplicates in part, or full, any VCU course or combination of courses that the student has already completed or enrolled in for credit. For example, a student who has completed courses in U.S. and European history, sociology, anthropology and psychology, or similar courses, is not eligible to take the social sciences and history general examination. The dean’s office of the school in which the student is a major makes the decision about the appropriateness of taking a particular examination.

Regulations for VCU students

1. CLEP credit is officially awarded only to students who are fully accepted into a VCU degree program.

2. A student may not attempt a subject or general examination if it duplicates in part, or full, any VCU course or combination of courses that the student has already completed or enrolled in for credit. For example, a student who has completed courses in U.S. and European history, sociology, anthropology and psychology, or similar courses, is not eligible to take the social sciences and history general examination. The dean’s office of the school in which the student is a major makes the decision about the appropriateness of taking a particular examination.

3. If a student has earned CLEP subject examination credit, the student may not take a VCU course for credit that would duplicate the CLEP credits already earned.

4. The CLEP general examination in English composition is not acceptable for VCU credit. Students may take the CLEP Freshman College Composition with essay subject examination for credit equivalent to UNIV 111. There is no CLEP exam equivalent for UNIV 200. In order to receive credit for the CLEP general examination in mathematics, the student must take the Mathematics Placement Test and test at the STAT 208, 210 or MATH 200 level. To make arrangements to take this placement test, contact the Testing Center at (804) 827-8108. Results should be reported to the dean of the school in which the student is a major.

5. A maximum of 54 semester credits can be earned through CLEP examinations.

Credit awarded on subject tests taken through the CLEP*

<table>
<thead>
<tr>
<th>Subject exam</th>
<th>Score</th>
<th>VCU equivalent</th>
<th>VCU credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>French (2 semesters)</td>
<td>50</td>
<td>FREN 101-102</td>
<td>8</td>
</tr>
<tr>
<td>French (4 semesters)</td>
<td>62</td>
<td>FREN 101-102, 201-202</td>
<td>14</td>
</tr>
<tr>
<td>German (2 semesters)</td>
<td>50</td>
<td>GRMN 101-102</td>
<td>8</td>
</tr>
<tr>
<td>German (4 semesters)</td>
<td>63</td>
<td>GRMN 101-102, 201-202</td>
<td>14</td>
</tr>
</tbody>
</table>
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Undergraduate credit by examination

Recognizing that VCU enrolls students of varying backgrounds and experiences, the university provides its students the opportunity to accelerate their education through credit by examination. The following outline describes conditions under which credit by examination may be given and the procedure for doing so.

1. With the approval of the dean, each department or program shall:
   a. Determine which, if any, courses shall be available for credit by examination. The student should check with the department offering course work in the area in which he or she wishes to take credit by examination for a list of the courses so designated.
   b. Determine the types of examinations, standards of evaluation and evaluators for the courses so designated.
   c. Determine the qualifications for students to be eligible to take the examinations.

2. The examinations, if available, may be taken by any enrolled student during the fall and spring semesters and during the summer session.

3. The student wishing to take credit by examination must meet the following requirements:
   a. Not have received a grade listed in this bulletin, including AU or W for the course for which credit by examination is sought. Also, the student should not have been granted transfer credit for a similar course taken elsewhere.
   b. Be a currently enrolled student as certified by the examining department.
   c. Meet departmental and school eligibility requirements as evidenced by the written approval of the chair of the examining department.

4. After consultation with the major adviser and within the first four weeks of a semester or the first week of a summer session, the student must complete the Credit by Examination Approval Form with the department chair. The form, available from the department, should be left with the chair when it is completed.

5. Within two weeks, the student is notified by the dean’s office of the time and place of examination.

6. After notification, but before taking the exam, the student must pay the university cashier the fee established by VCU for each credit being sought. As verification of payment, the student presents the receipt to the department chair before the examination is taken.

7. After the examination is taken, the results and the examination are sent to the dean’s office, which notifies the student of the results. If the student passes the examination, the course title, credits earned and the grade CR are recorded on the student’s permanent academic record. Credits so earned are applied toward the graduation requirement for total credits. However, these credits are not included in the computation of the student’s GPA.

Military service and ROTC courses

The university may grant credit for formal military service school courses offered by the various branches of the U.S. armed forces. The guidelines for granting such credits include:

1. The positive recommendation of the Commission on Accreditation of Service Experiences of the American Council on Education (ACE) as stated in the most recent edition of “A Guide to the Evaluation of Educational Experiences in the Armed Services” (http://militaryguides.acenet.edu/).

2. Acceptable scores earned on subject tests (DSST) taken through Defense Activity for Non-traditional Education Support (DANTES), a college-credit-by-exam-agency. The DANTES Subject Standardized Tests (DSST) program is an extensive series of examinations in college subject areas that are comparable to the final or end-of-course examinations in undergraduate courses.

3. Acceptable scores earned on subject tests taken through the College-Level Exam Program (CLEP), a college-credit-by-exam program.

4. NOTE: Credit is not awarded for experiential learning.

The applicability of such credit toward the student's degree program is interpreted by the department or school in which the student seeks a degree. Credits accepted are counted as credits earned toward the degree, but are not used in the computation of the student’s GPA. Students should consult with the assistant or associate dean for undergraduate affairs of the school or college for further details about the procedures for awarding credit for military service school courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Spanish (2 semesters)</td>
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</tr>
<tr>
<td>SPAN 101-102</td>
<td>8</td>
</tr>
<tr>
<td>Spanish (4 semesters)</td>
<td>66</td>
</tr>
<tr>
<td>SPAN 101-102, 201-202</td>
<td>14</td>
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<tr>
<td>American government</td>
<td>50</td>
</tr>
<tr>
<td>POLI 103</td>
<td>3</td>
</tr>
<tr>
<td>Educational psychology</td>
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<tr>
<td>PSYC 305</td>
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<tr>
<td>History of the U.S. 1</td>
<td>50</td>
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<tr>
<td>HIST 103</td>
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<td>History of the U.S. 2</td>
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<td>HIST 104</td>
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<tr>
<td>Human growth &amp; development</td>
<td>50</td>
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<tr>
<td>EDUS 301</td>
<td>3</td>
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<td>Intro to psychology</td>
<td>50</td>
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<tr>
<td>PSYC 101</td>
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<tr>
<td>Intro to sociology</td>
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<td>SOCY 101</td>
<td>3</td>
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<tr>
<td>Western civilization 1</td>
<td>50</td>
</tr>
<tr>
<td>HIST 101</td>
<td>3</td>
</tr>
<tr>
<td>Western civilization 2</td>
<td>50</td>
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<tr>
<td>HIST 102</td>
<td>3</td>
</tr>
<tr>
<td>College algebra</td>
<td>50</td>
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<tr>
<td>MATH 141</td>
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<td>Calculus</td>
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<td>Chemistry</td>
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<td>CHEM 101-102</td>
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<td>College mathematics</td>
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<td>MATH 131</td>
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<td>Pre-calculus</td>
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<td>MATH 151</td>
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<td>General biology</td>
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<td>BIOL 151-152</td>
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</tr>
<tr>
<td>Financial accounting</td>
<td>50</td>
</tr>
<tr>
<td>ACCT 203</td>
<td>3</td>
</tr>
<tr>
<td>Info systems &amp; computer apps</td>
<td>50</td>
</tr>
<tr>
<td>INFO 360</td>
<td>3</td>
</tr>
<tr>
<td>Intro to business law</td>
<td>50</td>
</tr>
<tr>
<td>MGMT 323</td>
<td>3</td>
</tr>
<tr>
<td>Principles of marketing</td>
<td>50</td>
</tr>
<tr>
<td>MKTG 301</td>
<td>3</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>50</td>
</tr>
<tr>
<td>ECON 210</td>
<td>3</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>50</td>
</tr>
<tr>
<td>ECON 211</td>
<td>3</td>
</tr>
<tr>
<td>College composition</td>
<td>50</td>
</tr>
<tr>
<td>UNIV 111</td>
<td>3</td>
</tr>
</tbody>
</table>

* Decisions regarding VCU equivalents were made in consultation with the VCU departments.
Credit is accepted directly from each of the above agencies. Students may request their military transcripts from the following websites:

Army: http://aarts.army.mil/
Navy and Marines: https://www.navycollege.navy.mil/smart_info.cfm
Coast Guard: http://www.uscg.mil/hq/cg/active_duty/go_to_college/official_transcript.asp

Military students may request their score sheets from the following website:
CLEP and DSST subject exams: http://www.dantes.doded.mil/Sub%20Pages/Exams/Exams_Transcript_Request.html

Transcripts and/or score sheets may be sent to Virginia Commonwealth University Transfer Center, 900 Park Ave., P.O. Box 842532, Richmond, VA 23284-2532.

Army ROTC is open to any VCU student. Advanced standing may be granted to veterans, Junior ROTC graduates or members of the Reserves/National Guard after the department chair’s review of academic records and verification of ROTC academic alignment. The number of credits accepted toward graduation requirements is determined by each school. See Military Science and Leadership in the “College of Humanities and Sciences” section of this bulletin.

Military credits awarded (from AARTS/SMARTS transcripts) based on ACE recommendations

(Additional credit may be awarded on a case-by-case basis.* )

<table>
<thead>
<tr>
<th>Course</th>
<th>Recommended credit</th>
<th>VCU equivalent</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical conditioning/fitness</td>
<td>1-3</td>
<td>HPEX 1XX</td>
<td>1-3</td>
</tr>
<tr>
<td>First aid</td>
<td>1-3</td>
<td>HPEX 1XX</td>
<td>1-3</td>
</tr>
<tr>
<td>Military science/leadership</td>
<td>1-3</td>
<td>MILS 101</td>
<td>1-3</td>
</tr>
<tr>
<td>Personal/community health</td>
<td>1-3</td>
<td>HPEX 1XX</td>
<td>1-3</td>
</tr>
<tr>
<td>Oral communications</td>
<td>1-3</td>
<td>SPCH 121</td>
<td>1-3</td>
</tr>
<tr>
<td>Personnel supervision/management</td>
<td>1-3</td>
<td>MGMT 1XX</td>
<td>1-3</td>
</tr>
<tr>
<td>Basic math</td>
<td>1-3</td>
<td>MATH 1XX</td>
<td>1-3</td>
</tr>
<tr>
<td>Computer technology</td>
<td>1-3</td>
<td>INFO 1XX</td>
<td>1-3</td>
</tr>
<tr>
<td>Technical writing</td>
<td>1-3</td>
<td>ENGL 1XX</td>
<td>1-3</td>
</tr>
<tr>
<td>Human resources management</td>
<td>1-3</td>
<td>MGMT 1XX</td>
<td>1-3</td>
</tr>
</tbody>
</table>

* Decisions regarding VCU equivalents were made in consultation with the VCU departments.

Credit awarded on subject tests taken through the CLEP*

<table>
<thead>
<tr>
<th>Subject exam</th>
<th>Score</th>
<th>VCU equivalent</th>
<th>VCU credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>French (2 semesters)</td>
<td>50</td>
<td>FREN 101-102</td>
<td>8</td>
</tr>
<tr>
<td>French (4 semesters)</td>
<td>62</td>
<td>FREN 101-102, 201-202</td>
<td>14</td>
</tr>
<tr>
<td>German (2 semesters)</td>
<td>50</td>
<td>GRMN 101-102</td>
<td>8</td>
</tr>
<tr>
<td>German (4 semesters)</td>
<td>63</td>
<td>GRMN 101-102, 201-202</td>
<td>14</td>
</tr>
<tr>
<td>Spanish (2 semesters)</td>
<td>50</td>
<td>SPAN 101-102</td>
<td>8</td>
</tr>
<tr>
<td>Spanish (4 semesters)</td>
<td>66</td>
<td>SPAN 101-102, 201-202</td>
<td>14</td>
</tr>
<tr>
<td>American government</td>
<td>50</td>
<td>POLI 103</td>
<td>3</td>
</tr>
</tbody>
</table>

Credit awarded on subject tests taken through the DANTES*

<table>
<thead>
<tr>
<th>DSST exam</th>
<th>Score</th>
<th>VCU equivalent</th>
<th>VCU credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical writing</td>
<td>No equivalent</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Intro to computing</td>
<td>No equivalent</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Contemporary Western Europe, 1946-1990</td>
<td>48</td>
<td>HIST 1XX</td>
<td>3</td>
</tr>
</tbody>
</table>

* Decisions regarding VCU equivalents were made in consultation with the VCU departments.
Senior Citizens Higher Education Program

A senior citizen is any person, who, before the beginning of any semester in which they claim entitlement to the senior citizen educational benefit is 60 years of age and has had legal domicile in the commonwealth of Virginia for one year. The senior citizen may take courses without paying tuition or mandatory fees, except for course-/program-related fees, under certain conditions. If the senior citizen had a taxable income of not more than $15,000 for Virginia income tax purposes for the year preceding the year in which enrollment is sought, the individual may take a course for academic credit. If the person’s taxable income exceeded $15,000, the individual may only audit the course for free. A senior citizen, regardless of income level, may take a noncredit course for free.

No limit is placed on the number of terms, quarters or semesters in which a senior citizen who is not enrolled for academic credit may register for courses, but the individual can take no more than three noncredit courses in any one semester. There will be no restriction on the number of courses that may be taken for credit in any semester, or on the number of semesters in which an eligible senior citizen may take courses for credit. Upon determination that a person qualifies as a senior citizen, the university may require the senior citizen to submit the appropriate documents verifying their income, in addition to the completed senior citizen waiver form each semester in which the senior citizen requests enrollment for credit.

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

1. The senior citizen shall meet the appropriate admission requirements of the institution in which the student plans to enroll.
2. The senior citizen may be admitted to a course only on a space-available basis after all tuition-paying students have been accommodated, unless the senior citizen has completed 75 percent of the degree requirements necessary for a degree. At such time in the senior citizen’s program, the senior citizen can enroll in courses at the same time as other tuition-paying students.

Enrichment and acceleration opportunities

Special honors programs and courses are offered at the university. Refer to the appropriate school sections of this bulletin for further information. Interdisciplinary honors courses designed for superior freshmen in any program are also available.

Early Admission Program

The Early Admission Program permits exceptional students the opportunity to enroll in undergraduate programs at the university as freshmen after the completion of the junior year of high school. The program is available to students who demonstrate readiness for college by their high school record, SAT results and in an interview with an admissions counselor. Applicants for the Early Admission Program must present a minimum GPA of 3.5 and minimum combined SAT scores of 1180 (on the Critical Reading and Math sections of the test only) or demonstrate exceptional talent in their intended area of study. Additionally, early admission applicants must be within two of the required units for graduation and have the written approval of the high school principal (or designee) to seek admission to college as full-time undergraduate students. Candidates interested in this program should contact the Office of Undergraduate Admissions for further information.

Advanced Scholars Program

Qualified high school students from Richmond and surrounding area high schools may be permitted to carry college-level courses at the university while concurrently completing the high school diploma. Students may select courses of interest and, upon successful completion of the courses, may receive college credit. However, courses selected should not be available in the high school curriculum.

Candidates must be nominated and approved by the secondary school principal. A maximum of 100 candidates are accepted each semester and candidates may enroll in no more than two courses per semester.

Credits earned through the International Student Exchange Program

Credits earned by a VCU student through ISEP appear on the student’s transcript, but are not included in the computation of the student’s cumulative GPA. See the “Education Abroad” section of this bulletin. This policy became effective July 1990.

Credits for dual-enrollment courses

Qualified students who have taken college-level work while still enrolled in a secondary school may receive academic credit. Courses taken as dual enrollment courses will be treated as VCU courses or transfer credits according to the evaluation guidelines.

* Decisions regarding VCU equivalents were made in consultation with the VCU departments.
As a guide to secondary schools, the following criteria for selection are considered.

1. Each candidate must be nominated and approved by the secondary school principal.

2. Each candidate must have achieved a total of 1180 points on the SAT or 118 on the PSAT, and a minimum GPA of 3.2 on a 4.0 scale.

3. Each candidate must be a high school junior or senior.

4. The desired courses to be studied must be available and appropriate.

5. All parties should emphasize that tuition is charged for courses taken as an advanced scholar.

Notification forms and other information may be obtained from the Office of Undergraduate Admissions, Virginia Commonwealth University, P.O. Box 842526, Richmond, VA 23284-2526 or (804) 828-1222.

Orientation

The university provides orientation to all new undergraduate students. Orientation programs are designed to increase the students’ awareness of the university’s programs, services and facilities and to provide opportunities for faculty advising and registration for their first semester of classes.

After acceptance to the university, students are sent detailed information regarding the orientation program. Included in the summer orientation program is a program for the parents of freshman students that is especially helpful to their understanding of the university and its future relationship to their sons and daughters.

For additional information about orientation, contact New Student Programs, Virginia Commonwealth University, P.O. Box 842002, Richmond, VA 23284-2002, (804) 828-3700; or visit the Web site at www.vcu.edu/uc/osp. For information regarding orientation to MCV Campus programs, contact the individual department.

Readmission guidelines

Readmission is subject to individual degree program requirements. Contact the program department or consult the appropriate program portion of this bulletin for specific information.

Students who withdraw from all courses after the first week of the semester are considered to have been enrolled for that semester. A student who does not attend VCU for three or more successive fall and spring semesters (excluding summer sessions), must submit an application for readmission to the Office of Undergraduate Admissions. See the Undergraduate Readmission/Continuous Enrollment Chart for details on readmission and continuous enrollment. Students who have attended another institution and wish to return after the allowable absence period or who have been suspended since their last enrollment at VCU also must apply for readmission. This application must be made before the application submission date for the semester in which the student plans to return.

Students who wish to return to VCU after enrolling at another institution are considered transfer applicants and are reviewed for admission based on the transfer admission guidelines related to good standing and cumulative GPA. Students who attend another institution during periods of suspension from VCU are considered readmitted students for admission purposes. If readmitted, they assume their VCU GPA and academic status; any course work taken at another institution during the suspension will be evaluated according to regular procedures.

Readmission applicants who wish to change their majors may be required to meet additional requirements for some programs. Applicants to the School of the Arts must submit supplemental materials as described in the Application for Undergraduate Admission.

Students may apply for readmission to VCU for the semester following completion of the first suspension period (two semesters, one of which may be summer). Under certain circumstances, students may be considered for readmission from the second and final suspension after a period of five years. Students on second suspension who wish to return before the required completion of the five-year suspension period must appeal their readmission to the Academic Regulations Appeals Committee. Students should contact the dean’s office of the school or college from which they were suspended to initiate this process. For more information on suspension policies, refer to the “Academic Regulations and General Degree Requirements” section of this bulletin.

Applicants who have been suspended from the university for nonacademic or disciplinary reasons are referred to the Office of the Vice Provost for Student Affairs and Enrollment Services for pre-admission clearance.

Undergraduate readmission/continuous enrollment chart

A student who does not attend VCU for three or more successive fall and spring semesters, excluding summer session, must submit an application for readmission to the Office of Undergraduate Admissions. Students who have attended another institution and wish to return after the allowable absence period or who have been suspended since their last enrollment at VCU also must apply for readmission.

The semester appearing in the “Must Return Semester” column associated with the term in the “Last Enrolled Semester” column denotes when a student must return to remain in continuous enrollment. If a graduate student wishes to return after the “must return semester,” they are required to apply for readmission.

Summers are no longer included in the calculation of the allowable absence period. If a student chooses to return during the summer, the calculation of the allowable absence period is reset and begins anew with the following fall semester, thus summers are included under the “Last Enrolled Semester” column.

Students last enrolled summer 2005 or earlier wishing to return in a degree-seeking status must apply for readmission.

<table>
<thead>
<tr>
<th>Last enrolled semester</th>
<th>Must return semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2011</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>Summer 2011</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>Fall 2011</td>
<td>Spring 2013</td>
</tr>
<tr>
<td>Spring 2012</td>
<td>Fall 2013</td>
</tr>
<tr>
<td>Summer 2012</td>
<td>Fall 2013</td>
</tr>
<tr>
<td>Fall 2012</td>
<td>Spring 2014</td>
</tr>
<tr>
<td>Spring 2013</td>
<td>Fall 2014</td>
</tr>
<tr>
<td>Summer 2013</td>
<td>Fall 2014</td>
</tr>
<tr>
<td>Fall 2013</td>
<td>Spring 2015</td>
</tr>
<tr>
<td>Spring 2014</td>
<td>Fall 2015</td>
</tr>
<tr>
<td>Summer 2014</td>
<td>Fall 2015</td>
</tr>
<tr>
<td>Fall 2014</td>
<td>Spring 2016</td>
</tr>
<tr>
<td>Spring 2015</td>
<td>Fall 2016</td>
</tr>
<tr>
<td>Summer 2015</td>
<td>Fall 2016</td>
</tr>
<tr>
<td>Fall 2015</td>
<td>Spring 2017</td>
</tr>
<tr>
<td>Spring 2016</td>
<td>Fall 2017</td>
</tr>
<tr>
<td>Summer 2016</td>
<td>Fall 2017</td>
</tr>
<tr>
<td>Fall 2016</td>
<td>Spring 2018</td>
</tr>
<tr>
<td>Spring 2017</td>
<td>Fall 2018</td>
</tr>
<tr>
<td>Summer 2017</td>
<td>Fall 2018</td>
</tr>
<tr>
<td>Fall 2017</td>
<td>Spring 2019</td>
</tr>
<tr>
<td>Spring 2018</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>Summer 2018</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>Fall 2018</td>
<td>Spring 2020</td>
</tr>
<tr>
<td>Spring 2019</td>
<td>Fall 2020</td>
</tr>
<tr>
<td>Summer 2019</td>
<td>Fall 2020</td>
</tr>
<tr>
<td>Fall 2019</td>
<td>Spring 2021</td>
</tr>
<tr>
<td>Spring 2020</td>
<td>Fall 2021</td>
</tr>
<tr>
<td>Summer 2020</td>
<td>Fall 2021</td>
</tr>
</tbody>
</table>

The Honors College and guaranteed admission

For detailed information on admission to the Honors College and the Guaranteed Admission Program, see the Honors College section of this bulletin.

Tuition, fees and expenses

Student Accounting Department
1015 Floyd Avenue
P.O. Box 843036
Richmond, Virginia 23284-3036
(804) 828-2228
Students are reminded that they are ultimately responsible for any unpaid balance on their account as a result of the Office of Financial Aid or their sponsor canceling or reducing the award. Also see the federal financial aid refund policy.

Any communication disputing an amount owed, including an instrument tendered as full satisfaction of a debt, must be submitted to the Director of Student Accounting, Student Accounting Department, P.O. Box 843036, Richmond, VA 23284.

VCU participates in the Virginia Set-off Debt Collection Act of 1981. Under the provisions of this act, a Virginia individual income tax refund is subject to the university’s claim for unpaid balances of tuition and fees.

Dishonored payment items
A charge of $50 will be levied for all dishonored payment items. Returned payment items include returned checks and dishonored credit or debit card payments. A student who pays a past-due balance with a dishonored payment item may be subject to having his or her current and/or future registration cancelled.

Loan repayment
Before graduation or withdrawal from the university, students may be required to attend a loan counseling exit session. Please refer to the "Academic Regulations and General Degree Requirements" section of this bulletin.

Tuition determination and student classification
Tuition is determined by the number of credit hours a student is taking, the student’s residency classification, course of study and classification level. For in-state tuition benefits, the student must comply with Section 23-7.4 of the Code of Virginia.

All applicants to VCU who wish to be considered for in-state tuition rates as Virginia residents must submit the Application for Virginia In-state Tuition Rates, which is part of the application for undergraduate admission. The residency determination of the applicant is conveyed at the time of admission.

New and continuing students initially classified as non-Virginians for tuition purposes may request a review of the initial residency determination by completing an Application for Change of Domicile available from the Office of Records and Registration (online). The student must present clear and convincing evidence that he or she is not residing in the state primarily to attend school. The application deadline is 30 days prior to the start of the semester, and it is the responsibility of the student to establish or to file an appeal to change his/her residency classification prior to the start of classes for the semester under consideration. In accordance with the Code of Virginia, applications received after the start of the semester must be considered for the next semester. Submit completed applications with documentation to the university residency appeals officer. Processing may require four to six weeks; therefore it is strongly recommended that applications be submitted earlier than the stated deadline.

Our service to students is limited to assuring that they understand the procedures for appealing and that they have access to information about the relevant sections of the Code of Virginia. We provide information about the steps of our process and access to the applicable sections of the statute and the associated guidelines. We provide qualified staff to review the appeals and make decisions based on the information students provide. What we cannot do is provide advisement to students as to how to present their case for review; we cannot become the student’s advocate since we must make the decision.

Students approved for a change to in-state status for tuition purposes are notified by mail with copies of their approval letters sent to the Office of Financial Aid and the Student Accounting Department. Students denied this status are also notified by mail. The denial letter informs the student of procedures for appeal of this decision, to include filing an appeal with the University Residency Appeals Committee. Students who submit fraudulent applications, falsify documentation or conceal information will be subject to reclassification, payment of all nonresident fees owed and university discipline.

Please note that a student with in-state status for tuition purposes who exceeds 125 percent of the credit hours needed to complete his program will be assessed a tuition surcharge.
**Tuition and fees charges**

- **University fee**
- **Student activity fee**
- **Student Government Association fee**
- **Student health fee**
- **Technology fee**
- **Capital outlay fee**
- **Online course fee**
- **Off-campus fees**

Students accepted into an undergraduate degree program who accept the offer of admission must pay a nonrefundable tuition deposit (amount of deposit may vary according to program). This deposit is credited toward the tuition charge for the first semester. If the student accepts the offer, pays the fee, then decides not to enroll for the intended semester, the deposit is forfeited.

Students are classified as full time or part time based on the total number of credit hours in which they are enrolled for each semester. For tuition charges, there is no distinction between day and evening students. A student must be enrolled in at least 12 credits each semester to achieve full-time undergraduate status. An undergraduate year includes two semesters.

Full-time undergraduate students are charged a flat tuition fee per semester. An undergraduate student enrolled for more than 18 credit hours during any semester will be charged a course overload fee on a per-credit-hour basis above the full-time tuition rate. The overload fee will not apply to students in first professional programs. Part-time undergraduate students, those enrolled in less than 12 credits, are charged tuition on a per-credit-hour rate based on their program. Students classified as Virginia residents pay lower tuition than out-of-state students.

In addition to tuition, students must pay the mandatory fees described in this section.

Holiday Intersession courses are billed on the spring semester’s invoice, but are computed separately from the spring semester’s charges. The cost of a Holiday Intersession course is the standard per-credit-hour tuition with no fees based on the student’s classification and program.

Nondegree-seeking students who hold bachelor’s degrees are classified as DHG (degree-holder graduate) if they enroll in one or more graduate courses. DHG students registered for fewer than nine credit hours are charged a graduate per-credit-hour rate. If they enroll in nine or more credits, they are charged at the full-time graduate rate. Nondegree-seeking students who hold undergraduate degrees are classified as DHU (degree-holder undergraduate) if they enroll in all undergraduate courses. DHU students who enroll in 12 or more credits are charged at the full-time undergraduate rate. DHU students who enroll in less than 12 credits (all undergraduate courses) are charged at the undergraduate per-credit-hour rate. If students make changes to their course enrollment by the end of the add/drop week, their classification and charges change in accordance with these guidelines.

**University fee**

This fee is used by the university to support student facilities, campus development, intercollegiate athletics and other programs. Full-time students pay a flat-rate university fee each semester. Part-time students pay this fee on a per-credit basis.

**Student activity fee**

This fee is used to support social, cultural and other student activities on the Monroe Park Campus. These activities include concerts, plays, student organizations and publications.

Full-time students on the Monroe Park Campus pay a flat-rate student activity fee, while part-time students on this campus pay this fee on a per-credit basis. Students on the MCV Campus are not charged this fee.

**Student Government Association fee**

This fee is used to support social, cultural and other student activities on the MCV Campus. Monroe Park Campus students are not charged this fee.

**Student health fee**

All full-time students on both campuses must pay the student health fee. Part-time students may participate in the University Student Health Services on an elective basis by paying the student health fee. The University Student Health Services offers unlimited office visits for acute and chronic ailments, after-hours emergency room referrals and laboratory tests, among other services. The fee does not cover accidental injury or hospitalization.

**Technology fee**

The technology fee is charged to all undergraduate, graduate and professional students in all programs. Full-time students pay a flat rate. Part-time students pay a per-credit-hour rate. The fee is used to fund improved access and assistance with information technology.

**Capital outlay fee**

The capital outlay fee is charged to all full-time and part-time non-Virginia resident, on-campus students. Full-time students pay a flat rate. Part-time students pay a per-credit-hour rate. The fee is mandated by the General Assembly with revenues used to reimburse the state for debt service costs attributable to nonresident students related to financing of buildings and equipment.

**Online course fee**

The online course fee is charged for undergraduate and graduate online courses. The fee covers operational and personnel support to develop and maintain online courses.

**Off-campus fees**

The university fee, the student activity fee, the Student Government Association fee and the student health fee are not charged to students taking off-campus classes (except School of Social Work).

**Special fees**

Because of specialized programs, various schools and departments may charge each student additional fees to cover special materials, equipment breakage and other costs. For specific information about special fees, refer to the Student Accounting Department Web site or to the specific school or department section in this bulletin.

**Room fees and housing costs**

**Room fees**

Beginning April 1 new students accepted to the university may apply online for on-campus housing at [www.housing.vcu.edu](http://www.housing.vcu.edu). A housing prepayment fee of $250 (also payable online) is required at the time of application and is credited toward the student’s first-semester housing costs. New students accepted for the fall semester who cancel their housing assignment and contract on or before June 30 will be refunded the $250 prepayment fee. New students accepted for the spring semester have until Jan. 3 to cancel their housing assignment and contract and still be refunded the $250 prepayment fee. After these dates, cancellations are not permitted and students will be held to the terms and conditions of their housing contracts. Returning students will be allowed to cancel their contracts without penalty if a written request is received on or before March 12. After this date, cancellations are not permitted. The cancellation dates do not apply to Cabaniss Hall residents and ASPIRE program participants. Students are advised to carefully read the terms and conditions of their housing contracts prior to signing.

Housing contracts extend through the nine-month academic year or for a 12-month period, depending upon the type of residence hall assignment. Students are not released from their housing contract between semesters. Questions regarding housing contracts should be directed to VCU Residential Life and Housing via e-mail at [vcuhousing@vcu.edu](mailto:vcuhousing@vcu.edu) or by calling (804) 828-7666.
Housing costs

Half the yearly housing cost is charged to the student’s account each semester and is paid the same time that tuition and other fees are due. Additionally, students will be held responsible for the cost of any damages to their room, its furnishings and its common living area during their residency.

University dining plans

Dining plans
VCU retail locations
Dining Dollars
Online enrollment and payment

Please address all dining service concerns and questions to VCU Dining Services, 1111 W. Broad St., Suite A, Room 128, P.O. Box 980247, Richmond, VA 23298-0247; call (804) 828-1148; email dining@vcu.edu; or visit the website at www.bsv.vcu.edu/vcufood.

All VCU students residing in university housing are required to purchase one of the residential dining plans available through VCU Dining Services. Students residing in university apartments, MCV Campus Low-Rise residence halls and graduate students are exempt from this requirement. VCU dining plans consist of Blocks and Dining Dollars. Blocks provide a specific number of meals to be used at any time during the semester at Market 810 in Shafer Court Dining Center, Jonah’s in the Larrick Student Center or any VCU retail location participating in the VCU Dining Services Meal Exchange Program. More than one VCU dining plan may be purchased per semester; however, dining plan blocks and Dining Dollars do not carry over and are forfeited at the end of each semester.

Essential dining plans

• 300 Block Plan + $100 Dining Dollars
• 250 Block Plan + $300 Dining Dollars
• 250 Block Plan + $175 Dining Dollars
• 200 Block Plan + $300 Dining Dollars
• 200 Block Plan + $150 Dining Dollars

Preferred dining plans

• 150 Block Plan + $105 Dining Dollars
• 100 Block Plan + $75 Dining Dollars
• 50 Block Plan + $75 Dining Dollars
• 25 Block Plan + $75 Dining Dollars
• 5 Block Plan + $160 Dining Dollars

The VCU residential dining center, Market 810, provides unlimited servings and is located on the second floor of Shafer Court Dining Center on the Monroe Park Campus. In addition to serving dining plan participants, VCU dining centers accept cash, credit cards, Dining Dollars and RamBucks.

VCU retail locations

Monroe Park Campus
• Einstein Bros. Bagels: located on the first level of Shafer Court Dining Center
• Park Place Food Court, Commons Café and Commons Convenience: located in the University Student Commons
• Starbucks Coffee: located in the James Branch Cabell Library
• C-store located on the first floor in the Grace E. Harris Hall
• IHOP Express, Raising Cane’s, and Croutons, Salads and Wraps: located at Laurel and Grace Place
• Bookmark Bistro, featuring Quiznos: located in Barnes & Noble @ VCU on the Monroe Park Campus
• Bleecker Street Café: located in Snead Hall
• Chili’s, Starbucks Coffee and Cary Street Market & Deli: located in the Cary and Belvidere Residential College

MCV Campus
• Einstein Bros. Bagels and Wendy’s*: located in the Gateway Building
• Hideaway Café: located in the Hunton Student Center
• Jonah’s, a culinary emporium, and Starbucks Coffee: located in the Jonah L. Larrick Student Center

*Wendy’s accepts credit cards and cash only.

Dining Dollars

Dining Dollars is a rechargeable declining-balance account on your dining plan that allows you to make tax-free food purchases at any VCU dining center or VCU retail location. The tax advantage of Dining Dollars provides an 11 percent savings on each VCU Dining Services purchase. Additional Dining Dollars may be added following the purchase of a dining plan at any time during the semester. Additions may be made in increments of $25 (i.e., $25, $50, $75). Dining Dollars can be purchased by check, cash or credit card only through the VCU Dining Services’ Customer Services Office.

Online enrollment and payment

Online enrollment for a VCU Dining Plan is available at www.bsv.vcu.edu/ vcufood. Students will be billed through the Student Accounting Department and payment may be made online through VCU eServices at www.eservices.vcu.edu.

Dining Plan changes or cancellations must be made by contacting VCU Dining Services at (804) 828-1148 or online at www.bsv.vcu.edu/ vcufood. The last date to make changes or cancellations to a plan is Sept. 7, 2012, for fall and Jan. 25, 2013, for spring.

Installment Payment Plan

The Installment Payment Plan assists students in meeting the cost of their higher education by offering a convenient payment option. The university-administered IPP is offered only during the fall and spring semesters. The plan distributes the cost of tuition, fees, housing, dining and communications fee charges for a semester into four equal installments.

All students attending the university with current charges of $100 or more are eligible to participate. All prior semester balances must be paid in full to be eligible.

Students who receive financial aid are also eligible for participation in the IPP. These students may deduct their financial aid (including third party-sponsored scholarships and 529 accounts) to determine the net total due. These payments are not considered installment payments. If it is $100 or more, the remaining amount may be paid in installments.

In some cases, a student may receive a financial aid refund, and then subsequent charges for the semester are added to the student’s account. If the student has received a refund, he or she is ineligible to participate in the IPP unless the refund has been repaid to the university in full. The student must then pay the initial payment and follow the instructions to enroll in the IPP.

There is a $25 nonrefundable application fee payable with the first installment of each semester. The IPP option must be selected each fall and spring semester regardless of whether the student participated during a previous semester. Interest is not assessed on the outstanding balance. Information about how to participate in the IPP and the online enrollment process is available online at www.enrollment.vcu.edu/accounting/payment_plan.html.

University refund policy

The official university tuition and fees refund policy is applicable only for the fall and spring semesters (excluding short/nonstandard courses) and is outlined in the table below.

Definition of drop vs. withdraw

Drop – Charges are removed to indicate that the student never attended the class. The student is not eligible to receive financial aid, and any financial aid already credited to the student’s account based on the original course registration will be removed from the student’s account and may create a balance due to the university.
Withdrawal — Results in the academic grade of W. Charges are assessed and adjusted according to the University Refund Policy. Students who have been given a medical withdrawal are assessed and adjusted no differently than other withdrawals. Students may owe a balance to the university.

<table>
<thead>
<tr>
<th>Withdrawal/drop period</th>
<th>Student refund</th>
<th>Retained by university</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop prior to the first day of classes</td>
<td>100% tuition and fees</td>
<td>0%</td>
</tr>
<tr>
<td>Drop/withdraw first week of class</td>
<td>100% tuition and fees</td>
<td>0%</td>
</tr>
<tr>
<td>Withdraw second week of class</td>
<td>80% tuition and university fee; 20% tuition and university fee; 100% of all other fees</td>
<td></td>
</tr>
<tr>
<td>Withdraw third week of class</td>
<td>60% tuition and university fee; 40% tuition and university fee; 100% of all other fees</td>
<td></td>
</tr>
<tr>
<td>Withdraw fourth week of class</td>
<td>40% tuition and university fee; 60% tuition and university fee; 100% of all other fees</td>
<td></td>
</tr>
<tr>
<td>Withdraw after fourth week of class</td>
<td>0% tuition and fees; 100% all fees</td>
<td></td>
</tr>
</tbody>
</table>

This table pertains to both complete withdrawals and reduced course loads for fall and spring semesters only.

The refund policy and deadlines of the English Language Program are different from the university’s refund policy for academic classes. Details of the policy may be obtained from the English Language Program Office in the Office of International Education.

A full refund for holiday intersession will be granted if the course is dropped on the day of the first class meeting. Partial refunds are not granted.

A full refund for a short course’s tuition and applicable fees will be granted if the course is dropped no later than the day following the first day of a given class. Partial refunds are not granted.

A full refund for summer tuition and applicable fees will be granted if the course is dropped no later than the day following the first day of a given class. (This deadline also is applicable if the class does not meet on two consecutive days.) Students reducing their academic course load to fewer than full time (12 credits for undergraduates and nine credits for graduates) before the end of the last day to drop a course will be entitled to a refund of tuition and applicable fees reflecting the reduced course load. No refund of tuition and fees is given for withdrawals during the summer semester.

Students who are financial aid recipients and withdraw from all courses prior to completing 60 percent of the semester are subject to the Federal Return of Title IV Funds Policy. For more details see the financial aid section of this bulletin.

Refunds will be computed based on the actual withdrawal date certified by the Office of Records and Registration. Refunds will not be made to students who do not attend classes and have not completed the required withdrawal procedure. Refund processing may take approximately two weeks. Exceptions to this refund policy are made only in rare instances. Written application for an exception must be filed in the Student Accounting Department to the university’s Refund Waiver Appeals Committee. Appeals must be submitted within three years from the semester in which the student is appealing.

Students will not be entitled to a refund of room fees:

- If they are suspended from the residence halls for disciplinary reasons.
- If they voluntarily withdraw from the university residence halls but remain registered for any course(s) at the university unless clearance is granted through Residential Life and Housing.

Cancellations or changes to dining plans will be accepted up to 4 p.m., Friday of the second week of classes.

Refer to the Room and Dining Contract Terms and Conditions for additional information.

Requests for refunds that are not generated from the overpayment of financial aid should be made in writing to VCU Student Accounting Department, P.O. Box 843036, Richmond, VA 23284-3036. Refund request forms are available at the Student Services Centers, 1015 Floyd Ave. or 1101 E. Marshall St., Room 1-055 and on the Web at www.vcu.edu/enroll/forms.

In accordance with credit card regulations, the university will refund the credit card account with any credit balance that may result on a student’s account as the outcome of a credit card payment. The remaining credit balance, if any, will be refunded to the student.

Students are responsible for paying any increase in charges that may occur after the generation of any refund.

Military services tuition relief, refund and reinstatement guidelines

These guidelines apply to students whose service in the uniformed services (military) has necessitated their sudden withdrawal or prolonged absence from their enrollment at Virginia Commonwealth University and provides for the required re-enrollment of such students. Students are offered the following enrollment secession options:

1. Drop all courses before the end of the add/drop period and receive a full reduction of tuition and fee charges. Students residing in university housing and participating in a dining plan will be released from their housing and dining service contracts and will receive a prorated refund of these charges. Students will be asked to sign the drop request form with the director of military student services indicating that they are not receiving a financial aid refund. If the reduction of charges results in an overpayment on the account after any financial aid or third party awards have been reduced, the student will be issued a refund.

This option might best meet the needs of students who are called to active duty service during the first week of school and did not receive a financial aid refund check or direct deposit.

2. Receive a grade of Incomplete (IM – incomplete military) in one or all courses. Students residing in university housing will be released from their housing and dining service contracts and will receive a prorated refund of these charges. Students who chose to take a grade of IM will not have tuition and fees reduced for these courses because, upon receipt of an approved change of grade, credits will still be earned for the semester. Students will have 12 months from the date that they return from active service to complete the course work and earn a course grade. If a student received financial aid, the amount recovered to the financial aid accounts will follow the Federal Financial Aid Refund Policy.

This option might best meet the needs of students who have essentially completed all course work in a class for the semester, but have yet to turn in a final project, an exam or other materials. It should be agreed upon between the instructor and the student that the remaining course work can reasonably be completed during the 12-month period.

3. Accept administrative withdrawal (WM – withdrawn military) from all courses as of the effective date of the orders to active duty. If this option is elected, a full refund of all tuition, fees and prorated room and dining charges will be made. If a student received financial aid, the amount recovered to the financial aid accounts will follow the Federal Financial Aid Refund Policy. If the reductions of charges results in an overpayment on the account after any financial aid or third party awards have been reduced, the student will be issued a refund.

This option might best meet the needs of students who are called to national service in the middle of a semester and have not completed 75 percent of their class requirements. This option also might best meet the needs of students who are leaving the university during the first week of class and received a financial aid refund check or direct deposit as a result of their financial aid.

4. Students who have completed 75 percent of the course requirements at the time of military activation and, notwithstanding certain exceptions noted below, who meet requirements as determined and agreed upon by the faculty instructor and the student may receive full course credit.

Students may receive full course credit if 75 percent of course requirements have been completed, under certain circumstances. The instructor is responsible for determining what percentage of course requirements have been completed based on factors to include but not limited to contact time,
examinations, projects, work experience and clinical experience. The awarding of full credit cannot be made where the incomplete requirements are essential components of the course or program required by law or regulatory bodies, required for competency in the work place, or required to complete licensure examinations.

Leaving the university
To initiate this process, the student must provide the Office of Military Student Services with a copy of his or her active duty orders in addition to a printed copy of his or her course registration for that semester and indicate Option 1, 2, 3 or 4 for each course. If Option 4 is selected, the student must provide documentation from the instructor. The director of military student services will forward all documentation to the university registrar to take the appropriate enrollment action, post the appropriate grades and send a copy of the orders and a copy of the student course request statement to the director of financial aid and the director of student accounting.

Returning to the university
Students who withdrew from the university as a result of military deployment, mobilizations or duty changes are entitled to return without having to requalify for admission so long as the student (a) returns after a cumulative absence of no more than five years and (b) notifies the appropriate admissions office of the intent to return to the university not later than three years after the completion of military service obligation. The student may return to the university in the same program of study. With the consultation of an adviser, a comparable program of study may be chosen for discontinued programs.

Accident insurance
VCU is not responsible for accidents occurring to students in connection with class, laboratory, shop, fieldwork, athletics, student activities, travel or other activities. However, the university offers its students an approved insurance plan, providing substantial benefits at group rates. The insurance extends for a 12-month period beginning Aug. 18, or from the beginning of the second semester to the next Aug. 18, and includes coverage for accidents, hospitalization, medical, surgical and other benefits for illnesses. Married students may enroll spouses and children. The university strongly recommends, but does not require, that all students enroll in student group health insurance. For further information, contact University Student Health Services or visit the Web at www.students.vcu.edu/health/insurance.

Financial aid
Office of Financial Aid
Harris Hall
1015 Floyd Ave.
P.O. Box 843026
Richmond, Virginia 23284-3026
(804) 828-6669 • Fax (804) 827-0060
www.enrollment.vcu.edu/finaid
www.enrollment.vcu.edu/finaid/contact.html

Brenda Burke
Director
The Office of Financial Aid provides a variety of services to help students afford higher education via grants, work-study employment and loans. The Office of Financial Aid administers and distributes funds from federal, state, institutional and private fund sources. One-on-one appointments are available to students, their parents, faculty and staff. Financial aid funds are applied first to the student’s university bill. Refunds are generated when financial aid exceeds university charges.

VCU uses all available funds to help students gain access to a college education. Eligibility for financial aid varies depending on a student’s academic and financial circumstances. In most cases, each student will qualify for some form of financial assistance. Current and detailed information on financial aid programs, policies, procedures and links to free scholarship search services are available on the office’s website at www.enrollment.vcu.edu/finaid.

Counseling center locations
The Office of Financial Aid provides four counseling and information centers to prospective and enrolled students. You may visit the offices in person or submit a written request to receive printed information.

Monroe Park Campus
Grace E. Harris Hall
1015 Floyd Avenue, First Floor
P.O. Box 843026
Richmond, Virginia 23284-3026
(804) 828-6669
Fax: (804) 827-0060
www.enrollment.vcu.edu/finaid/contact.html

Schools of Allied Health Professions, Nursing and Pharmacy
VMI Building, Room 334
1000 East Marshall Street
P.O. Box 980277
Richmond, Virginia 23298-0277
(804) 828-2702
Fax: (804) 827-0060

School of Dentistry
Lyons Building, Room 309
520 North 12th Street
P.O. Box 980566
Richmond, Virginia 23298-0566
(804) 828-9953
Fax: (804) 828-6072

School of Medicine
Sanger Hall, Room 1-008
1101 East Marshall Street
P.O. Box 980565
Richmond, Virginia 23298-0565
(804) 828-4006
Fax: (804) 827-5555

General information
eServices – online records access
Email – official method of communication
Identification requirements
University bill

Many students at the university receive financial aid. Below are some recommendations and requirements of the Office of Financial Aid.

eServices – online records access
Students are encouraged to use eServices, a password-protected service for viewing VCU student records online, to check the status of their financial aid application and award package. Students also may register for classes, print bills and more. The eServices website is accessed through myVCU portal at www.vcu.edu.

Email – official method of communication
Students are required to obtain an official VCU student email account within one week of the beginning of their first semester of enrollment. Students are responsible for reading university-related communications sent to their official VCU student email account in a timely fashion. The Office of Financial Aid uses email to provide financial aid information, to request documentation to support financial aid application data and to provide financial aid application status and award information. Information on how to set up an account is available online at www.vcu.edu/vcu/webmail.html.

Identification requirements
Students must provide picture identification, preferably a VCUCard, for in-person access to financial aid records. For the student’s protection, information provided over the telephone and email may be limited if the financial aid staff member is not confident of the student’s identity.
University bill
The Student Accounting Department issues online bills for tuition, fees and other university charges. When financial aid awards (grants, scholarships and loans) are not enough to pay university charges, the remaining balance must be paid from personal funds, credit card or the VCU Installment Payment Plan. Federal work-study awards will not be deducted from university charges because those funds are paid directly to the student, based on hours worked. Any outstanding balance owed will prevent a student from registering for courses and receiving official transcripts. Students who fail to pay their balance on time may be assessed a late payment fee and have a financial hold placed on their account. If the balance remains outstanding after the semester ends, their account may be referred to the VCU Collection Unit at which time collection costs will be assessed.

Types of financial aid
Loans
Grants and scholarships
Work-study
There are three basic types of financial aid: loans, grants and work-study. Each type has different features and advantages.

Loans
In terms of total dollars available, long-term loan programs provide the most dollars. A loan is money borrowed and must be repaid at a later time. In most cases, the student is the borrower and repays the loan once he or she is no longer pursuing a degree or certification at least at the half-time enrollment level. There also is a loan program where the parent is the borrower and begins repaying the loan while the student is still enrolled. All educational loans carry competitive interest rates and terms. Some include interest benefits, meaning the federal government pays the interest on the loan while the student is enrolled. Student loan repayment generally begins after the student is no longer enrolled half time. Multiple repayment plans provide the borrower with flexible repayment options. Selected loan programs include:

• Federal Direct Loan (subsidized and unsubsidized)
• Federal Perkins Loan
• Health Professions Student Loan
• Loan for Disadvantaged Students
• Nursing Student Loan
• Primary Care Loan
• Federal Direct PLUS Loan

First-time borrowers in the Federal Direct Loan Program must complete entrance counseling prior to the first loan disbursement. Directions for completion of this requirement can be found on the website of the Financial Aid Office at www.enrollment.vcu.edu/finaid/programs/loans/entrance_interview.html.

Grants and scholarships
Grants and scholarships are awarded without any expectation of repayment. The total dollar amount of available aid in the form of grants and scholarships is less than that of total dollar amount of loans. Most grants are reserved for students with the greatest financial need. Most scholarships are based on merit. Selected programs include:

Undergraduate programs
• Federal Pell Grant
• Commonwealth Award (CA)
• Virginia Guaranteed Assistance Program (VGAP)
• Federal Supplemental Educational Opportunity Grant (FSEOG)
• College Scholarship Assistance Program (CSAP)
• VCU Scholarship Awards
• Honors Scholarships
• Departmental Scholarships

Health profession programs
• Scholarships for Disadvantaged Students
• State Dental Practice Scholarships
• Virginia Medical Scholarships
• General Assembly Nursing Scholarships
• Departmental Scholarships

Work-study
Work-study is a form of financial aid that pays wages for work performed through employment. Work-study positions are located on campus and in approved locations off campus. Job listings are posted to the Career Center’s website at www.students.vcu.edu/careers.

Eligibility, availability and special circumstances
Eligibility for financial aid
Availability of financial aid for special programs
Special circumstances

Eligibility for financial aid
Most students are eligible for some type of financial aid regardless of family financial circumstances. Basically, to receive aid from any of the federal or state student aid programs, students must:

• Submit a Free Application for Federal Student Aid (FAFSA) or Renewal FAFSA designating VCU (school code 003735) to receive FAFSA results.
• Demonstrate financial need, except for some loan programs.
• Have a high school diploma or a General Education Development (GED) Certificate.
• Be enrolled or accepted for enrollment to an eligible degree or certificate program.
• Be enrolled at least half time, six or more undergraduate credit hours (exceptions possible for Pell Grants) or five or more graduate credit hours.
• Be a U.S. citizen or eligible noncitizen.
• Have a valid Social Security number (unless from the Republic of the Marshall Islands, the Federated States of Micronesia or the Republic of Palau).
• Meet Satisfactory Academic Progress (SAP) standards as defined by the VCU Office of Financial Aid (the full VCU SAP policy is available on the Web at www.enrollment.vcu.edu/finaid/progress.html).
• Certify that federal and state financial aid will be used for educational purposes only.
• Not be in default on a federal student loan and not owe money on a federal student grant.
• Comply with Selective Service registration, if required.
• Not be convicted under federal or state law of sale or possession of illegal drugs.
• Detailed information can be found in the federal Student Guide, available in print form from the VCU Office of Financial Aid or electronically on the Federal Student Aid website at http://studentaid.ed.gov/.

Availability of financial aid for special programs

Summer studies
Limited financial aid may be available during the summer semester. Students interested in financial aid for the summer semester should view the VCU Summer Schedule of Classes at www.pubapps.vcu.edu/scheduleofclasses (posted in March) for more details.

Students interested in financial aid for summer terms must have a FAFSA on file with the Financial Aid Office and complete a summer aid application, available on the Financial Aid website.

Study abroad
Financial assistance is available to eligible students enrolled in approved study-abroad programs. All study-abroad programs must be coordinated through the Office of International Education at (804) 828-8471. Students should work with a
Special circumstances

Financial aid eligibility decisions are made using federal, state and institutional regulations and policies. Students may appeal their award offers if special circumstances warrant a review. Reasons for an appeal might include one of the following documented circumstances:

- Loss or reduction of employment earnings.
- Disability or death of parent or spouse.
- Separation or divorce.
- Loss or reduction of untaxed income.
- Unusual medical expenses.
- Dependent and child-care expenses.

Any financial aid staff member can advise a student about the procedures on how to file an appeal.

Applying for financial aid

Application process
- Priority filing dates
- Applying after the priority filing date

Quality assurance

To ensure that information provided on the FAFSA is accurate, a student’s application may be selected for review at any time during an enrollment period, and the student will be requested to provide documentation that supports the information. By signing the FAFSA, a student (and the student’s parent or spouse, if applicable) agrees to furnish such documentation. If the documentation is not provided when requested, financial aid awards will be canceled and any funds already disbursed may need to be repaid.

Satisfactory Academic Progress (SAP)

The Office of Financial Aid will review all students who have applied for financial aid to be sure that they are making progress toward completion of their degree/certificate. The SAP review will be conducted at least once annually (typically at the end of the spring semester, or whenever the student submits a completed FAFSA). SAP is a combination of qualitative and quantitative components and is measured by:

1. Grade point average. Undergraduate students must maintain a cumulative GPA based on credit hours attempted (transfer and AP credit hours are included in total hours attempted) as noted below. Graduate students must maintain a 3.0 cumulative GPA as specified by their department.
   - 1 to 23 credit hours attempted: minimum 1.5 GPA
   - 24 to 53 credit hours attempted: minimum 1.8 GPA
   - 54 to 84 credit hours attempted: minimum 2.0 GPA
   - 85 or more credit hours attempted: minimum 2.0 GPA

2. Completion rate. The completion rate is measured by the number of credit hours earned divided by the number of credit hours attempted. All students who need financial aid funding must successfully complete at least 67 percent of all credit hours attempted (attempted hours include incompletes, withdrawals, repetitions, progress grades, continuance grades and noncredit remedial courses).

3. Overall progress toward degree/certificate. Overall progress is measured by the number of credit hours attempted divided by the number of credit hours necessary to complete the degree or certificate program. Students who need financial aid funding may attempt no more than 150 percent of the hours required to complete their degree or certificate program.

When students fail to meet SAP requirements they will receive suspension notices indicating that they are ineligible to receive further financial aid. Students whose eligibility for financial aid has been suspended may submit an appeal if mitigating circumstances prevented the student from maintaining SAP. However, there is no guarantee that the appeal will be approved. Please refer to the Office of Financial Aid Web site at www.vcu.edu/enroll/finaid for more details on SAP requirements and the SAP appeal process.

Federal financial aid refund policy

Students who receive federal Title IV grant or loan assistance and withdraw from VCU before completing 60 percent of the semester (as measured in calendar days) must have their eligibility recalculated based on the federal Return of Title IV Funds formula. This federal formula specifies that a students financial aid eligibility must be recalculated based on the aid the student has earned (based on the number of days that the student was enrolled or attending VCU prior to withdrawal). Any unearned aid (for the period of enrollment that the student did not complete from the date of withdrawal to the end of the semester) must be returned to the appropriate Title IV programs from which the student was awarded.

For VCU students who withdraw prior to completing 60 percent of the semester, they will have to return or repay all or a portion of the aid funds that had been disbursed to their VCU account. As a result, students who withdraw prior to completing 60 percent of the semester may be responsible for all or a portion of their university bill that was previously paid by financial aid sources.

If a student does not officially withdraw from all classes but fails to earn a passing grade in at least one course, federal aid regulations require that the student be considered “unofficially withdrawn,” unless it can be documented that the student completed the enrollment period. Unofficial withdrawals require a Title IV refund.
calculation at the midpoint of the enrollment period. The reduction of federal aid will create a balance due to the university that must be repaid.

Veteran and reservist educational benefits and programs

The Veterans Affairs Office for VCU is located in Harris Hall on the Monroe Park Campus. Detailed information about eligibility for the programs listed below is available on the Web at www.enrollment.vcu.edu/rar/veterans_affairs.html. You also may contact the office to obtain printed material.

Veterans Affairs Office
James M. Chambliss, Certifying Official
Harris Hall
1015 Floyd Ave.
P.O. Box 842520
Richmond, Virginia 23284-2520
(804) 828-6166
Fax (804) 828-8121
E-mail: jmchambl@vcu.edu
Web: www.enrollment.vcu.edu/rar/veterans_affairs.html

Available programs

For details on any of these programs, please visit the Veteran’s Affairs page of the Division of Student Affairs and Enrollment Services website using the link provided above.

- Montgomery – GI Bill Active Duty (Chapter 30)
- Vocational Rehabilitation (Voc Rehab, Chapter 31)
- Veterans Education Assistance Program (VEAP, Chapter 32)
- Post 9-11 GI Bill (Chapter 33)
- Survivors’ and Dependents Educational Assistance Program (DEA, Chapter 35)
- Montgomery – GI Bill Selected Reserves (Chapter 1606)
- Reserve Education Assistance Program/Reap (Chapter 1607)
- Tutorial Assistance Program
- VA Work-Study Program
- Virginia Military Survivors and Dependents Education Program
- Post 9-11 – Active Duty (Chapter 33)/Yellow Ribbon Program
- Yellow Ribbon Program
- Transferability of Benefit

Eligibility requirements

Eligible veterans/spouses/dependents must comply with the following requirements to receive educational benefits as students:

1. The veteran/spouse/dependent must be accepted into a degree or certificate program or be matriculating as a nondegree-seeking student for only two semesters before having to declare a major.

2. The veteran/spouse/dependent must request certification by completing and submitting VCU’s VA Education Assistance form after obtaining approval via signature of their academic adviser and registering for courses each semester and each summer session from the Veterans Affairs Office.

3. The veteran/spouse/dependent is eligible to use benefits for only those courses taken toward a degree, certificate program or as prerequisite courses (only two semesters).

4. The veteran/spouse/dependent is not eligible to use benefits for courses taken on an audit basis, or if eliminating a course previously taken and paid for by the VA to remove a punitive grade not counted in GPA calculations via VCU’s historical repeat option. The repeated course(s) will be paid for by the VA but the student will incur a debt to the VA for the course(s) eliminated from the student’s GPA. The VA does not pay for courses that earn no credit.

5. The veteran/spouse/dependent is responsible for ensuring that transcripts are evaluated for transfer credits to be accepted by VCU. Students must submit this information to the Veterans Affairs Office for transmittal to the Veteran’s Administration Regional Office.

6. The Veterans Affairs Office must be notified by the student/veteran/spouse/dependent if they change, add, drop or withdraw from courses originally approved by the student/veteran/spouse/dependent’s academic adviser and certified by VCU’s Veterans Affairs coordinator/certifying official.

Academic regulations and general degree requirements

Students are responsible for knowing and fulfilling all general and specific degree requirements as described in this section.

It is the responsibility of all undergraduate students to be familiar with the Undergraduate Bulletin of record (the bulletin in effect at the time of official admission), as well as the academic regulations in individual school and department publications and on program Web sites; however, in all cases, the academic regulations and general degree requirements, as published on this Undergraduate Bulletin Web site, take precedence over individual program policies and guidelines.

Advising program

Individual student advising is an integral part of the VCU student’s academic program. Each degree-seeking student is assigned a faculty adviser who is available for academic and career advising. Nondegree-seeking students should contact the Bachelor of Interdisciplinary Studies and Nondegree-seeking Student Advising Program at (804) 827-UNIV (8648). For definitions of degree- and nondegree-seeking students, refer to the Categories of student enrollment section of this bulletin.

Additional assistance for all students is available from the Counseling Center and the University Career Center.

Current mailing address

Every VCU student is responsible for keeping a current mailing address on file with the Office of Records and Registration. Please verify your current address on eServices on the Web at https://my.vcu.edu.

If the student’s mailing address is not accurate, the student must submit in writing any change of address to the Office of Records and Registration, Harris Hall, 1015 Floyd Ave., P.O. Box 842520, Richmond, VA 23284-2520 or the Student Services Centers in Harris Hall or VMI Building.

All official mailings are sent to the permanent address on file in the Office of Records and Registration.

E-mail is considered an official method for communication at VCU because it delivers information in a convenient, timely, cost-effective and environmentally aware manner. Mail sent to the student’s VCU e-mail address may include notification of university-related actions, including disciplinary action. Students who use e-mail addresses other than their required name@vcu.edu e-mail address also must check their name@vcu.edu address frequently for official messages from the university.

Attendance regulations

The instructional programs at VCU are based upon a series of class meetings involving lectures, discussions, field experiences, special readings and reporting assignments. Therefore, it is important for each student to be in attendance on a regular basis. A student who misses a class session is responsible for completing all material covered or assignments made during the absence.

Instructors must clearly inform the student in the syllabus or in writing of the attendance requirements for each course and the corresponding consequences of poor attendance. Though the attendance requirements may vary widely from one course to another, students must abide by these requirements. Students cannot enroll in two courses that meet concurrently without written approval from the chair of each department involved.

Students having attendance problems should contact the instructor to explain the reasons for nonattendance and to discuss the feasibility of continuing in the course. If the student has fallen so far behind that the successful completion of the course is impossible, the student should withdraw from the course before the end of the first 10 weeks of classes.

If the student continues to miss class and does not officially withdraw from the course, the instructor may withdraw the student for nonattendance with a mark of “W” before the end of the first 10 weeks of classes or may assign an academic
grade at the end. Withdrawals are not permitted after the end of the first 10 weeks of classes. For classes that do not conform to the semester calendar, the final withdrawal date occurs when half of the course has been completed. Withdrawal dates for summer session classes are provided on the summer Schedule of Classes Web site at www.pubapps.vcu.edu/scheduleofclasses.

Religious observances
It is the policy of VCU to accord students, on an individual basis, the opportunity to observe their traditional religious holidays. Students wishing to observe a religious holiday of special importance must provide advance written notification to each instructor by the end of the second week of classes. On these dates, instructors are encouraged to avoid scheduling one-time-only activities that cannot be replicated. Through such strategies as providing alternative assignments or examinations, granting permission for audio or video recordings or the use of the Internet, faculty members are expected to make reasonable academic accommodations for students who are absent because of religious observance.

Mandated short-term military training
Students called to report for mandated military training must provide advance written notification to each instructor several weeks in advance of training. Faculty members are expected to make reasonable academic accommodations for students who are absent because of mandated short-term military training (short-term is defined as several days not to exceed one week).

Student conduct in the classroom
The instructional program at VCU is based upon the premise that students enrolled in a class are entitled to receive instruction free from interference by other students. Accordingly, in classrooms, laboratories, studios and other learning areas, students are expected to conduct themselves in an orderly and cooperative manner so that the faculty member can proceed with customary instruction. Faculty members (including graduate teaching assistants) may set reasonable standards for classroom behavior in order to meet these objectives. If a student believes that the behavior of another student is disruptive, the faculty member should be informed.

If a faculty member believes that a student's behavior is disrupting the class and interfering with normal instruction, the faculty member may direct the student to leave the class for the remainder of the class period. In such circumstances, the faculty member is the sole judge that the student's behavior is sufficiently disruptive to warrant a temporary dismissal from the classroom. Disruptive behavior on the part of the student may result in the filing of formal charges under the University's Rules and Procedures document.

Classification of students
Academic programs
Full-time and part-time degree-seeking students, but not nondegree-seeking students, are classified by credit hours earned as follows:

- Freshmen: 1 to 23 credit hours
- Sophomores: 24 to 53 credit hours
- Juniors: 54 to 84 credit hours
- Seniors: 85 credit hours and more

Health science programs
Classification is determined by curriculum requirements for individual programs.

Categories of student enrollment
VCU provides a variety of ways in which a student may pursue a course of study.

- Degree-seeking student
- Nondegree-seeking student

Degree-seeking student
This student has fulfilled the admission requirements of the university and a particular school and is enrolled in a bachelor’s (four-year) degree program or a health sciences preparatory program. A degree-seeking student may engage in studies as either a full-time student (12 credits or more per semester) or as a part-time student, and may enroll for day and/or evening classes.

Furthermore, a degree-seeking student may pursue a program of study in one of the following ways:

1. As a declared major in a school or college. The student who declares a specific major when entering VCU begins a course of study leading to a degree in the declared major. (The student may change the major at a later date.)

2. As an undeclared student. Students who have not selected a specific major, may select the “undeclared” category. Students are advised through the University College along general academic lines so they may enroll in courses that will assist them in more clearly defining their academic objectives.

The advising program is flexible enough to suit the interest of any student, yet it is basic to a number of fields of study in different schools. During the first year of study, students are encouraged to investigate various fields until they find a major that suits their interests, needs and goals.

Students must define these goals and declare a major area of study no later than the semester in which they complete 60 credits, generally after two years of study.

Nondegree-seeking student
A student who meets the requirements for undergraduate eligibility may enroll for credit as a nondegree-seeking student in day and/or evening classes at VCU without seeking admission to a degree program.

Undergraduate nondegree-seeking students are advised about course selections and aided in educational and vocational planning by the University College. Such students are ineligible for financial aid.

Permission to enroll as a nondegree-seeking student does not ensure later admission as a degree-seeking student. Continuance in this status is dependent on academic performance, and nondegree-seeking students are subject to the continuation regulations stated in this chapter.

The undergraduate nondegree-seeking student may pursue course work in one of the following categories:

1. As a nondegree holder. This student has not previously earned a baccalaureate degree. The student may take a maximum of 11 credits per semester (part time).

2. As a degree holder. This student has previously earned a baccalaureate degree at VCU or another accredited institution and plans to pursue additional undergraduate course work. The student may take a maximum of 19 credits per semester.

3. As a transient student. This student is presently seeking a baccalaureate degree at another institution of higher education, is in good standing at that institution and plans to pursue a course of study at VCU for no more than two semesters with the intent of transferring the work back to the home institution to complete the degree. The student may take a maximum of 19 credits per semester and must present a letter from the home institution approving the student’s status as a transient student at VCU. (Refer to the Nondegree-seeking student guidelines section of this bulletin).

Credits earned as a nondegree-seeking student are recorded on the student’s permanent academic record. There is no limit placed on the number of credits that can be earned in this classification. Nondegree-seeking students who wish to earn a baccalaureate degree at VCU are encouraged to seek admission to a degree program before accumulating 22 semester credits.

Nondegree-seeking student advising
Nondegree holders or degree holders who wish to take undergraduate classes are advised through the Bachelor of Interdisciplinary Studies and Nondegree-seeking Student Advising Program in the University College. Nondegree-seeking students must meet eligibility requirements (see Nondegree-seeking student guidelines section of this bulletin), are limited to a maximum of 11 credits per semester and are not eligible for financial aid. Nondegree-seeking degree holders (those students who already hold a baccalaureate degree) may take more than 11 credits, but also are not eligible for financial aid. Academic advisors assist nondegree-seeking students by providing educational planning and information about
Nondegree-seeking student guidelines

The first time a student registers as a nondegree-seeking student, he or she must meet the following conditions of eligibility as appropriate to his or her status:

1. Be a high school graduate or GED holder for one year before the intended semester of entry, or
2. Be an applicant who meets established admission requirements, or
3. Be a transfer student who is eligible to return to the former institution or has been out of school for at least one year for a first suspension or five years for the second suspension incurred at any institution, or
4. Be a former VCU student who is eligible to return. If the student has been suspended from VCU for academic reasons, eligibility for future enrollment must be re-established in accordance with procedures outlined in the Readmission guidelines section of the “Admission to the University” chapter and the suspension policies outlined in this chapter, or
5. Be a bachelor’s degree holder taking undergraduate courses, or
6. Be an eligible transient student (A transient student must present, before or at the time of registration, a letter from the home institution, which states that the student is in good standing, has permission to study at VCU for transfer back to the home institution and which outlines the courses to be studied at VCU.), or
7. Be a non-U.S. citizen who has been cleared through the Office of International Education.

Students are responsible for knowing the terms of eligibility and for stating that they are eligible for nondegree-seeking student status.

The first time a student registers as a nondegree-seeking student, proof of eligibility is required. Students must provide a signed Certificate of Eligibility form, which is available online at www.enrollment.vcu.edu/rar. A student also may establish eligibility by providing verification of high school graduation, GED certification or verification that he or she is eligible to return to the previous institution of study.

If the student’s eligibility cannot be verified or if the student is found ineligible, the grade on the course taken is changed to no credit (NC). An administrative hold is placed on future registrations until eligibility is established.

Nondegree-seeking students who hold bachelor’s degrees are classified as DHG (degree-holder graduate) if they enroll in one or more graduate courses. DHG students are charged the graduate rate. Nondegree-seeking students who hold undergraduate degrees are classified as DHU (degree-holder undergraduate) if they enroll in all undergraduate courses. DHU students who enroll in 12 or more credits are charged at the full-time undergraduate rate. If they make changes to their course enrollment by the end of the add/drop period, their classification and charges change in accordance with these guidelines.

Degree-holding nondegree-seeking students enrolling in graduate courses should refer to the online Graduate Bulletin.

Nondegree-seeking students who plan to earn a degree eventually must apply for degree admission and, depending on their credentials, may be required to complete 15 credits with an earned GPA of 2.0, which includes a minimum of two courses (totaling six credits) required by their degree curriculum.

Students studying on foreign visas, because of U.S. immigration and naturalization regulations, are expected to enroll as full-time students and usually are not permitted to enroll as nondegree-seeking students.

Registration policies

Continuous enrollment
Student load
Full-time and part-time students
Overload
Credits allowable during summer sessions
Prerequisite enforcement
Audit registration

Continuous enrollment

Students who withdraw from all courses after the first week of the semester are considered to have been enrolled for the semester. Students who do not attend VCU for three or more successive semesters excluding summer sessions must submit an application for readmission to the Office of Undergraduate Admissions. See the Undergraduate Readmission/Continuous Enrollment Chart for details on readmission and continuous enrollment. Students who have attended another institution and wish to return after the allowable absence period or who have been suspended since their last enrollment at VCU also must apply for readmission. This application must be completed and turned in before the application submission date for the semester in which the student plans to return. For health science programs, breaks in enrollment must be approved by the department.

Student load

Student load is the total number of credits for which a student is enrolled in any one semester. The semester credit is the quantitative unit by which courses are measured. A semester credit is defined as one 50-minute hour per week of lecture/recitation/computer-assisted instruction or not less than two 50-minute hours per week of laboratory work, fieldwork, internship or studio work throughout the semester.

Full-time and part-time students

A student enrolled in 12 credits or more during any fall or spring semester is classified as full time. A student enrolled in 11 credits or less during any semester is classified as part time. Both full-time and part-time students may seek degrees at VCU. However, some curricula may require full-time status. For more information, see the Categories of student enrollment section of this bulletin.

Overload

A degree-seeking undergraduate student may take no more than 19 credits per semester without special permission. This maximum load excludes holiday intersession courses. More than 19 credits per semester constitute an academic overload. Health science curricula requiring more than 19 credits per semester are exempt from this rule.

The student’s adviser and academic dean may permit a student to attempt more than 19 credits in any one semester. An Overload Approval Form may be obtained from the Student Services Centers in Harris Hall or Sanger Hall, or online at www.enrollment.vcu.edu/rar.

Undergraduate nondegree-seeking students may take no more than 11 credits per semester. Overloads for nondegree-seeking students are not permitted. A nondegree-seeking student who wishes to take more than 11 credits must first be accepted as a degree-seeking student.

For information about credits earned concurrently at another institution, see Concurrent Registration below.

Credits allowable during summer sessions

Each summer course is designed to provide one semester’s work. With careful scheduling, it is possible for students to earn as many as 15 credits during the summer if course work extends over the full summer calendar. Students may not take more than 15 credits without special permission from the Summer Studies Office, which is located at Grace E. Harris Hall, Room 129; or phone (804) 827-4586.

Summer classes are intensive and demanding. Students experiencing academic difficulty should consider this advisory carefully before registering for summer classes.
Prerequisite enforcement

Qualified course prerequisites take the form of a course subject (HIST) and number (101). Unless otherwise specified, the minimum grade required to satisfy a stated course prerequisite is a D. These prerequisites are enforced at the time of registration and assume successful completion of any prerequisite courses for which a student is currently enrolled. A registration error message is returned if one or more qualifying course prerequisites are not met. Specific prerequisites for an individual course can be viewed via eServices by selecting the View Catalog Entry link. Before seeking override permission to enroll for a specific course, students and advisers are encouraged to view the eServices catalog entry. Students who are preregistered in a course with one or more prerequisites and subsequently fail to satisfy the prerequisite(s) will be removed from the course prior to the end of add/drop.

Audit registration

Class size permitting, a student may register for a course on an audit basis. A student may register for audit only during add/drop and late registration periods. Auditing a course means a student enrolls in a course but does not receive academic credit upon completion of the course. A student who registers on an audit basis is subject to attendance regulations of that class and may be administratively withdrawn by an instructor for a violation of class requirements for audit students, before or after the normal 10-week withdrawal deadline. A student who registers for audit may be subject to other course requirements at the discretion of the instructor. Audit students are charged the regular rate of tuition and fees. An audit course is counted as part of the student’s semester load for the purposes of full- or part-time enrollment status but not for the purpose of financial aid.

Concurrent registration

Students enrolled in degree programs need prior approval to take courses at other institutions to ensure credits earned concurrently at another institution are accepted for transfer at VCU. Before registration at the other institution, the student needs approval by his or her adviser, department chair, program head and academic dean. A Request to Take Courses at Another Institution form may be obtained from the Student Services Centers in Harris Hall or Sanger Hall, or on the Web at www.enrollment.vcu.edu/academiccalendars. Credits taken at another institution will not be counted toward enrollment level for financial aid purposes at VCU unless these courses are part of an approved articulation agreement that allows or requires courses to be taken at another institution.

Change in registration

Once a student has registered for classes, changes in registration must be made according to the procedures listed below. Whenever a student makes any change in registration, the student should keep a copy of the new schedule as verification of the change. Changes in registration may affect current and future financial aid. Students are advised to consult with a financial aid staff member before making any changes to their enrollment status. See the “Financial Aid” section of this bulletin for detailed information on financial aid.

Cancellation of registration

Cancellation of registration must be completed before the end of the add/drop period. To cancel registration, a student must drop all courses using one of the following methods: 1) in writing to the Office of the Registrar, 2) in person at the Student Services Center or 3) via eServices on the Web at https://my.vcu.edu. Refunds are issued in accordance with procedures described under the refunds section in the “Tuition, fees and expenses” section of this bulletin. For readmission, consult the “Admission to the University” section of this bulletin.

During the add/drop period

Exact dates for add/drop periods before and during the first week of classes are listed in the university academic calendar at http://academiccalendars.vcu.edu. Changes in registration during the add/drop periods can be made on the Web. Courses dropped during add/drop periods do not show on a student’s permanent record. Changes from audit to credit or credit to audit must be made before the end of the add/drop and late registration periods and can be made at the Student Services Centers in Harris Hall or Sanger Hall.

After the add/drop period

After the add/drop period, students may not attend classes in which they are not registered. Students cannot add a course after the add/drop period. The university academic calendar, available on the Web at http://academiccalendars.vcu.edu, lists the date when add/drop ends. Drops are not permitted after the add/drop period has ended. However, students may withdraw from classes in accordance with prescribed procedures. To officially withdraw from a class, a student must obtain and file the appropriate form with the Office of Records and Registration or utilize eServices.

If a student stops attending a class and fails to withdraw, a failing grade is usually given for that course. Withdrawals become a part of the student’s academic record with a mark of W. In classes that do not conform to the normal semester calendar, the final withdrawal date is when half of the course is completed.

For further information see Withdrawal from the university below. Students who withdraw from a course may be entitled to a refund. See the University refund policy in the “Tuition, fees and expenses” section of this bulletin.

Evening studies

VCU day and evening programs are academically integrated, and credit earned in the evening program is identical to credit earned during the day. A student may register for courses in the evening as a degree-seeking or a nondegree-seeking student.

Withdrawal from the university

Students enrolled in health science programs should refer to school guidelines. Withdrawal may affect continuance in health science curricula.

Students who withdraw from all classes during a semester must notify, in writing, the Office of Records and Registration before the end of the first 10 weeks of classes. Monroe Park Campus students may withdraw from all classes using eServices by the end of the first 10 weeks of classes. Failure to notify the Office of Records and Registration of intention to withdraw from all classes or to withdraw from all classes using eServices can result in the assignment of failing grades in all or some of the courses. The final withdrawal date for classes whose meeting dates do not conform to the semester calendar is the day when half of the course has been completed. Forms to withdraw from courses are available at the Student Services Centers in Harris Hall and Sanger Hall, or on the Web at www.enrollment.vcu.edu/academiccalendars. A mark of W for withdrawn will appear on the student’s academic record for all courses. Charges are assessed and adjusted according to the University Refund Policy. See the University refund policy in the “Tuition, fees and expenses” section of this bulletin.

When extraordinary circumstances require that a student requests withdrawal after the final withdrawal date, the student must petition the Academic Regulations Appeals Committee for consideration of a waiver of this academic regulation. For further information, see the Appeal to waive an academic regulation, Academic Regulations Appeals Committee section of this bulletin.

Monroe Park Campus students who withdraw from all courses during a semester may attend the following semester without submitting an application for readmission. MCV Campus students should consult their program adviser prior to any withdrawals for academic or health-related reasons.

Also see Cancellation of registration above.

Medical withdrawal

A student may experience a medical condition that makes him or her unable to complete their studies once a semester is in progress. If this occurs before the add/drop period is over then the student should drop the class, and if it occurs after add/drop ends but before the last day to withdraw, then the student should withdraw from the class. This should be done using eServices or, if necessary, the dean’s office can assist with a drop or a withdrawal.

After the last day to withdraw but prior to the last day of classes per the academic calendar, the student may petition the dean (or dean’s designee) for a medical withdrawal from all courses. The student must present documentation of his or her medical condition that establishes a significant degree of impairment in continuing his or her studies. This documentation must include a letter, written on a letterhead, from a licensed health care provider that establishes the dates of
treatment, the diagnosis and the degree of impairment that the condition has created. This letter should also provide the date when the student became unable to attend classes, or when the impairment was considered significant enough to affect academic performance. The dean (or dean’s designee) may at his or her discretion determine whether a medical withdrawal from all courses is appropriate. A medical withdrawal may only be granted for all courses taken that semester.

The student’s transcript will reflect a grade of W for all courses taken that semester. No special designation for medical withdrawals is made on the transcript, and tuition and fees are levied in the same manner as other withdrawals. (See University refund policy section.) Medical withdrawals may impact future financial aid in relation to Satisfactory Academic Progress.

If the student wishes to be withdrawn from selected courses only, or if the dean (or dean’s designee) denies the petition, or if the request is made after the last day of classes per the academic calendar, then the student may pursue the matter further by filing a petition for a retroactive withdrawal with the Academic Regulations Appeals Committee.

Degree options

- Major
- Concentration
- Double major
- Dual degrees
- Second baccalaureate degree
- Minor
- Change of academic program (major, concentration, minor)

Major

A major is a student’s principal field of study. Majors are in specific disciplines or are interdisciplinary groupings of courses that are designed to make a coherent whole. The department or program administering the major specifies required and optional courses. VCU encourages students to select a major before they reach junior standing. Some majors require course sequences that necessitate earlier selection of the major in order to earn a baccalaureate degree within four years of full-time study.

The major becomes official only after the Office of Records and Registration has received the Change of Major/Minor Form signed by the appropriate school dean, department chair or program head. The major will appear on the student’s permanent record at the time of graduation.

The following minimum requirements are needed for completion of a major:

- At least 30 credits in the major area, at least half of which are at the 300 or 400 level.
- A GPA of 2.0 or higher in courses in the student’s major presented for graduation, unless the major specifies a higher GPA. Only credits taken at VCU are computed in the GPA.
- Any special conditions stipulated by the major.

Concentration

A concentration is a set of courses that provides structured study in a topic within the major. Concentrations require a minimum of nine credits, with a normal maximum of 15 credits. The department or program administering the concentration specifies required and optional courses. The concentration may be used to fulfill career needs or to facilitate in-depth investigation in a topic related to an area of interest to the student. The concentration becomes official only after the Office of Records and Registration has received the Change of Major/Concentration/Minor form signed by the appropriate school dean, department chair or program head. A concentration will appear on the student’s permanent record at the time of graduation. All courses in the concentration must be completed before graduation with a bachelor’s degree.

Double major

A double major is the concurrent fulfillment of the requirements of two majors. To earn a degree with two majors, the student must complete the courses required in each major, any collateral/prerequisite courses required for both majors and the general education requirements of the primary major.

The primary major is the major that appears on the transcript as the degree awarded and the second major will appear as an accompanying note. One diploma is awarded and both majors will appear on the student’s academic record.

The double major becomes official only after the Office of Records and Registration has received the Change of Major/Minor Form signed by the appropriate school dean, department chair or program head.

Dual degrees

Dual degrees are the concurrent fulfillment of the requirements of two majors and two degrees. To earn dual degrees, the student must fulfill all the requirements of the degree programs in both majors, the general education requirements of the primary degree and complete an additional 30 credit hours above the minimum hour degree requirement of the primary degree.

Second baccalaureate degree

A student who already has earned a baccalaureate degree from VCU or another institution and wishes to earn a second baccalaureate degree at VCU must complete the admissions process outlined in the “Admission to the University” chapter of this bulletin.

Students who have earned a baccalaureate degree at another regionally accredited institution but who wish to acquire a second baccalaureate degree from VCU will be considered to have fulfilled the University Core Curriculum as well as the University General Education Requirements for the second degree. Such students will be expected to meet all college, school and departmental requirements.

Students seeking a second baccalaureate degree must earn, at VCU and after acceptance into the second baccalaureate degree program, a minimum of 30 additional credits applicable to the second degree program. Each additional baccalaureate degree pursued requires an additional 30 applicable credits. Prior to undertaking the second degree, students must have their accumulated credits evaluated and approved by the Transfer Center.

In addition, students must meet the degree requirements for all undergraduate students as found in this section of the bulletin.

Minor

A minor is a set of courses analogous to and named for an existing major or discipline, or an interdisciplinary grouping of courses not represented by a major. Although a minor is not required for completion of most degree programs, a student may elect an approved minor. Minors require a minimum of 18 credits, with a normal maximum of 21 credits. At least half of the credits in a minor must be in 300- or 400-level courses, unless a greater number is specified. Students must achieve a 2.0 or higher GPA in designated course work in order to earn the minor. The department or program administering the minor specifies required and optional courses. The minor may be used to fulfill career needs or to facilitate in-depth investigation in a discipline of secondary interest to the student.

The minor becomes official only after the Office of Records and Registration has received the form signed by the appropriate school dean, department chair or program head. A minor will appear on the student’s permanent record at the time of graduation if the student has completed all requirements for the minor and has submitted a Graduation with Minor Application Form with the application for graduation. All courses in the minor must be completed before graduation with a bachelor’s degree. The Graduation with Minor Application Form is available at the Student Services Center in Harris Hall or in Sanger Hall, and online at www.enrollment.vcu.edu/rar/.

Change of academic program (major, concentration, minor)

Before initiating a change of major, concentration or minor, students should contact the office administering the program of study to carefully review the requirements and prerequisites. In certain programs — including those in the schools of the Arts, Business, Education, Mass Communications and in the Bachelor of Interdisciplinary Studies program — a candidate must fulfill additional requirements before authorization to enter the program is granted. Credits previously earned at VCU or at another university may or may not be applicable to the new academic program.

The academic program change becomes official after the Office of Records and Registration has received authorization from the appropriate school dean, department chair or program head. Changes in academic program may occur for
the current semester only through the add/drop period. Changes processed after the add/drop period are effective for the following fall or spring semester, and changes processed during the summer sessions are effective for the following fall semester.

Students currently enrolled in an MCV Campus program who wish to change to a curriculum on the Monroe Park Campus should follow the process mentioned above. Such students are subject to the continuance policy of the Monroe Park Campus after the academic program change has occurred. Students currently enrolled in an MCV Campus undergraduate program who wish to change to another MCV Campus undergraduate curriculum must go through the admission process outlined in the “Admission to the University” chapter of this bulletin.

Undergraduate degree-seeking students who wish to enter a graduate or professional program must go through the admission processes outlined in the Graduate or Professional Programsbulletins online. Students enrolled in a graduate or professional program of study at VCU who wish to return to a previous undergraduate program in which a degree has not been awarded may do so through a change in academic program as outlined above. Such students should consult the Graduate or Professional Programs bulletins regarding the process for withdrawing from their current graduate or professional program of study. If a degree already has been awarded in an undergraduate program of study, graduate or professional students must go through the admission process to re-enter an undergraduate program as outlined in the “Admission to the University” chapter of this bulletin.

Nondegree-seeking students intending to enter a degree-seeking status must go through the admission process outlined in the “Admission to the University” chapter of this bulletin or the admission processes outlined in the Graduate or Professional Programs bulletins online.

Degree requirements for all undergraduate students

Effective bulletin

Upper-level courses

GPA requirements

Total credits

25 percent rule

The degree requirements that must be fulfilled by all degree-seeking students are listed below. For additional degree requirements, students must consult the school and major departmental sections of this bulletin.

In order for a student to be awarded a diploma, he or she must resolve any outstanding charges owed to the university. The university does not guarantee the award of a degree or a certificate of satisfactory completion of any course of study or training program.

The university reserves the right to revoke any degree, certificate or other university recognition for cause. In addition, any time following the award of a degree, certificate or other university recognition, the university reserves the right to take appropriate action, including, but not limited to, the revocation of such degree, certificate or other university recognition, on the basis of academic misconduct discovered subsequent to, but which occurred prior to, the awarding of the degree, certificate or other university recognition. More specifically, when an action that constitutes a violation of the VCU Honor System leads to a finding that invalidates a major piece of work required for a degree, certificate or other university recognition so that the validity of the degree, certificate or other university recognition is jeopardized, the student or former student will be subject to a sanction that may include (a) rejection of a thesis, dissertation or other work, (b) revocation of a certification or other university recognition or (c) revocation of a degree.

Effective bulletin

The bulletin for the academic year a student enters or re-enters a degree program identifies the curriculum degree requirements for that student. Students in continuous enrollment may fulfill the curriculum degree requirements of the bulletin for the year they entered VCU or choose to be subject to the curriculum degree requirements articulated in a subsequent bulletin. Subsequent bulletins can be chosen throughout a student’s academic career. In either case, students must fulfill all curriculum degree requirements listed in the bulletin they choose.

A student’s effective bulletin will remain in effect until the degree is awarded. Change in academic program (major, concentration, minor) will not result in a change in effective bulletin unless the student chooses to be subject to the curriculum degree requirements articulated in a subsequent bulletin.

Students readmitted to the university will fall under the bulletin in effect at the time of readmission. At the discretion of the school dean, department chair or program head, degree requirements may be waived and/or previously taken courses may be substituted for requirements in effect at the time of readmission.

Upper-level courses

A minimum of 45 credits in 300- to 500-level courses or the equivalent is required for a bachelor’s degree.

GPA requirement

A cumulative GPA of 2.0 (grade C) or better is required in order to receive a baccalaureate degree. Only credits taken at VCU are computed in the GPA.

Some programs may require a higher cumulative GPA. Students should consult the section of this bulletin that deals with their major for any GPA requirements above the university’s 2.0 minimum.

Total credits

The minimum semester credits for any undergraduate VCU degree is 120. The total number of semester credits required for graduation depends on the student’s major and area of concentration. Specific information on total credit requirements is detailed under individual degree program descriptions in this bulletin.

25 percent rule

Degree candidates must complete at least 25 percent of the credit semester hours required for their bachelor’s degree program at VCU, including at least 30 of the last 45 credits. Exceptions to this rule may be granted by the Academic Regulations Appeals Committee (See www.provost.vcu.edu/pdfs/AcademicRegulationsAppealsCommitteeGuidelines.pdf). If the Academic Regulation Appeals Committee approves the request for a waiver, the approved credits must be completed within three years from the time of the waiver.

During a student’s last 45 credits at VCU, transfer credits attempted elsewhere must be approved in advance by the appropriate school dean, department chair or program head via the “Request to Take Courses at Another Institution” form, available online at www.enrollment.vcu.edu/esar.

This requirement does not apply to students who participate in VCU-sponsored programs abroad or who earn course credit at a cooperating university through VCU domestic and international university exchanges or who are pursuing an undergraduate certificate independently of a baccalaureate degree.

General course information

Course numbering system

Course interpretation

Course abbreviations

Course numbering system

All schools and programs within VCU use the following course numbering system. All course numbers consist of three digits (XXX). The first digit relates to the course level as follows:

0XX – Noncredit courses

Courses with these numbers are offered for students to make up deficiencies in previous training or to improve certain basic skills.

1XX and 2XX – Undergraduate, lower level

Courses offered primarily for undergraduate students and may not be used for graduate credit, although graduate students may be required to register for courses at this level to gain a necessary foundation for other course work.

3XX and 4XX – Undergraduate, upper level

Courses offered for advanced undergraduates and usually constitute the major portion of specific program work leading to the baccalaureate degree. On occasion, students will be advised by their graduate advisers to enroll in 4XX courses for prerequisite work. Graduate programs can require that 400-level courses be taken, but credit in these courses cannot count toward the graduate degree or in the graduate GPA.

5XX – Introductory graduate courses

Graduate students enroll for credit in these courses through the normal graduate advising system. Departments may limit the number of 500-level courses...
applicable to a graduate degree program. Advanced undergraduates may enroll in these courses for credit with consent of the offering department. Credit is applicable toward only one degree unless a student is admitted to a course of study that allows a defined number of shared courses.

5XX – First year, first-professional (dentistry, medicine, pharmacy and physical therapy) courses

Normally open to students enrolled in the D.D.S., D.P.T., M.D. and Pharm.D. programs. Certain courses of this group may be designated by the department and approved by the University Graduate Council for graduate credit.

6XX, 7XX and 8XX – Graduate courses

Graduate students enroll for credit in these courses through the normal graduate advising system. Credit is applicable toward only one degree unless a student is admitted to a course of study that allows a defined number of shared courses.

6XX and 7XX – Professional graduate courses

6XX: second year, first-professional [dentistry, medicine, pharmacy and physical therapy (second and third year)] courses normally open only to students enrolled in the D.D.S., M.D. and Pharm.D. programs. Certain courses of this group may be designated by the department and approved by the Graduate Council for graduate credit.

7XX: third and fourth year, first-professional (dentistry, medicine and pharmacy) courses normally open only to students enrolled in the D.D.S., M.D. and Pharm.D. programs. Certain courses of this group may be designated by the department and approved by the Graduate Council for graduate credit.

Course interpretation

A single-number listing for a course, such as HIST 101, indicates it is a one-semester course and may be offered each semester or only one semester each year.

Courses listed with a double number, such as HIST 201, 202, are designated as semester courses. They consist of two one-semester courses either of which may be taken without the other.

Courses listed with a double number, such as CHEM 101-102, are designated as a continuous course. They consist of two one-semester courses, the first of which can be taken without the second, but the second of which cannot be taken without the successful completion of the first.

Course abbreviations

<table>
<thead>
<tr>
<th>Abbrev.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT</td>
<td>Accounting</td>
</tr>
<tr>
<td>ADLT</td>
<td>Adult education</td>
</tr>
<tr>
<td>ADMS</td>
<td>Administration and supervision</td>
</tr>
<tr>
<td>AFAM</td>
<td>African American studies</td>
</tr>
<tr>
<td>ALHP</td>
<td>Allied health professions</td>
</tr>
<tr>
<td>AMST</td>
<td>American studies</td>
</tr>
<tr>
<td>ANAT</td>
<td>Anatomy and neurobiology</td>
</tr>
<tr>
<td>ANTH</td>
<td>Anthropology</td>
</tr>
<tr>
<td>APPM</td>
<td>Applied music</td>
</tr>
<tr>
<td>ARBC</td>
<td>Arabic</td>
</tr>
<tr>
<td>ARTE</td>
<td>Art education</td>
</tr>
<tr>
<td>ARTF</td>
<td>Art foundation</td>
</tr>
<tr>
<td>ARTH</td>
<td>Art history</td>
</tr>
<tr>
<td>ARTS</td>
<td>Arts</td>
</tr>
<tr>
<td>ATTR</td>
<td>Athletic training</td>
</tr>
<tr>
<td>BIOC</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>BIOL</td>
<td>Biology</td>
</tr>
<tr>
<td>BIOS</td>
<td>Biostatistics</td>
</tr>
<tr>
<td>BIOZ</td>
<td>Biology laboratory</td>
</tr>
<tr>
<td>BNFO</td>
<td>Bioinformatics</td>
</tr>
<tr>
<td>CCTR</td>
<td>Clinical and translational research</td>
</tr>
<tr>
<td>CHEB</td>
<td>Chemical biology</td>
</tr>
<tr>
<td>CHEM</td>
<td>Chemistry</td>
</tr>
<tr>
<td>CHEZ</td>
<td>Chemistry laboratory</td>
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<tr>
<td>CHIN</td>
<td>Chinese</td>
</tr>
<tr>
<td>CINE</td>
<td>Cinema</td>
</tr>
<tr>
<td>CLED</td>
<td>Counselor education</td>
</tr>
<tr>
<td>CLLS</td>
<td>Clinical laboratory sciences</td>
</tr>
<tr>
<td>CLRS</td>
<td>Clinical radiation sciences</td>
</tr>
<tr>
<td>CLTZ</td>
<td>Clinical radiation sciences laboratory</td>
</tr>
<tr>
<td>CLZE</td>
<td>Chemical and life science engineering</td>
</tr>
<tr>
<td>CMLI</td>
<td>Comparative literature</td>
</tr>
<tr>
<td>CMSC</td>
<td>Computer science</td>
</tr>
<tr>
<td>COAR</td>
<td>Communication arts</td>
</tr>
<tr>
<td>COOP</td>
<td>Cooperative education</td>
</tr>
<tr>
<td>CRAFT</td>
<td>Craft and material studies</td>
</tr>
<tr>
<td>CRJS</td>
<td>Criminal justice</td>
</tr>
<tr>
<td>CRJZ</td>
<td>Criminal justice laboratory</td>
</tr>
<tr>
<td>DANC</td>
<td>Dance and choreography</td>
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<tr>
<td>DANZ</td>
<td>Dance and choreography laboratory</td>
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<tr>
<td>DENH</td>
<td>Dental hygiene</td>
</tr>
<tr>
<td>DENS</td>
<td>Dental special topics</td>
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<td>DESI</td>
<td>Design</td>
</tr>
<tr>
<td>DNAP</td>
<td>Nurse anesthesia practice</td>
</tr>
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<td>DOMX</td>
<td>Domestic exchange program</td>
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<td>EBUS</td>
<td>E-business</td>
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<td>ECON</td>
<td>Economics</td>
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<tr>
<td>ECSE</td>
<td>Early childhood special education</td>
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<tr>
<td>EDLP</td>
<td>Educational leadership</td>
</tr>
<tr>
<td>EDUS</td>
<td>Educational studies</td>
</tr>
<tr>
<td>EGRB</td>
<td>Biomedical engineering</td>
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<tr>
<td>EGRE</td>
<td>Electrical and computer engineering</td>
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<tr>
<td>EGRM</td>
<td>Mechanical engineering</td>
</tr>
<tr>
<td>EGRN</td>
<td>Nuclear engineering</td>
</tr>
<tr>
<td>EMOD</td>
<td>Emotional disturbance</td>
</tr>
<tr>
<td>EMSA</td>
<td>Emergency medical sciences and administration</td>
</tr>
<tr>
<td>ENDO</td>
<td>Endodontics</td>
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<td>ENED</td>
<td>English/English education</td>
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<td>English</td>
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<td>Engineering</td>
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<td>Engineering laboratory</td>
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<td>ENLP</td>
<td>English Language Program</td>
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<td>ENVS</td>
<td>Environmental studies</td>
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<td>Environmental studies laboratory</td>
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<tr>
<td>EPID</td>
<td>Epidemiology and community health</td>
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<tr>
<td>EUCU</td>
<td>European cultures</td>
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<tr>
<td>FASH</td>
<td>Fashion design and merchandising</td>
</tr>
<tr>
<td>FELL</td>
<td>Fellowship</td>
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<tr>
<td>FIRE</td>
<td>Finance, insurance and real estate</td>
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<tr>
<td>FLET</td>
<td>Foreign literature in English translation</td>
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<td>FMBA</td>
<td>Fast Track M.B.A.</td>
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<td>French</td>
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<td>Foreign languages</td>
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<td>FRSC</td>
<td>Forensic science</td>
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<td>FRSZ</td>
<td>Forensic science laboratory</td>
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<td>GDES</td>
<td>Graphic design</td>
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<td>GENP</td>
<td>General practice</td>
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<td>GEOG</td>
<td>Geography</td>
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<td>GEOZ</td>
<td>Geography laboratory</td>
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<td>Graduate studies</td>
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<td>German</td>
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<td>GRTY</td>
<td>Gerontology</td>
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<td>GVPA</td>
<td>Government and public affairs</td>
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<td>HADE</td>
<td>Health administration/executive</td>
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<tr>
<td>HADM</td>
<td>Health administration</td>
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<td>HCMG</td>
<td>Health care management</td>
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<td>HEMS</td>
<td>Health and movement sciences</td>
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<td>HGEN</td>
<td>Human genetics</td>
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<td>HIST</td>
<td>History</td>
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<td>HONR</td>
<td>Honors College</td>
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<tr>
<td>HPEX</td>
<td>Health, physical education and exercise science</td>
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<td>HPEZ</td>
<td>Health, physical education and exercise science laboratory</td>
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<tr>
<td>HSEP</td>
<td>Homeland security and emergency preparedness</td>
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<tr>
<td>HUMS</td>
<td>Humanities and sciences</td>
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<tr>
<td>HUSI</td>
<td>Humanities and sciences interdisciplinary</td>
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<tr>
<td>IDDS</td>
<td>Interdisciplinary developmental disability studies</td>
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<td>IDES</td>
<td>Interior design</td>
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<td>Industrial hygiene</td>
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<td>INFO</td>
<td>Information systems</td>
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<td>INSC</td>
<td>Interdisciplinary science</td>
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<td>INTL</td>
<td>International studies</td>
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</table>
Grading and marking system

Evaluation and final grade reports
Grades and grade points
Repeated courses
Grade exclusion policy
Change of grade

Evaluation and final grade reports
Students are encouraged to discuss their progress in courses with their instructors, especially before the withdrawal deadline.

University policy requires faculty to provide students with feedback about their academic performance before the semester or class withdrawal date. Although such feedback does not always take the form of a letter grade, grades do provide a clear indication of class progress.

Students who do not attend class are responsible for dropping or withdrawing from class during the established dates. Exceptions to this policy are made only in rare instances. Requests for an exception must be filed with the Academic Regulations Appeals Committee within three years of the semester of enrollment.

Grades are available via the Web through eServices at https://my.vcu.edu.

Grades and grade points
VCU course work is measured both in terms of quantity (semester hours of credit) and quality (grades). Grades are assigned according to a letter system. Each letter is assigned a grade-point value. These letter grades and their respective meaning and grade-point values follow:

<table>
<thead>
<tr>
<th>Grade letter</th>
<th>Meaning</th>
<th>Grade-point values per semester credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>FI</td>
<td>Incomplete changed to fail</td>
<td>0.0</td>
</tr>
<tr>
<td>AP</td>
<td>Advanced Placement</td>
<td>(___)</td>
</tr>
<tr>
<td>AU</td>
<td>Audit</td>
<td>(___)</td>
</tr>
<tr>
<td>CO</td>
<td>Continued</td>
<td>(___)</td>
</tr>
<tr>
<td>CR</td>
<td>Credit</td>
<td>(___)</td>
</tr>
<tr>
<td>H</td>
<td>Honors</td>
<td>(___)</td>
</tr>
<tr>
<td>HP</td>
<td>High Pass</td>
<td>(___)</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>(___)</td>
</tr>
<tr>
<td>IB</td>
<td>International Baccalaureate</td>
<td>(___)</td>
</tr>
<tr>
<td>IM</td>
<td>Incomplete Military</td>
<td>(___)</td>
</tr>
</tbody>
</table>
Mark of incomplete military (IM)
See the Defense crisis tuition relief, refund and reinstatement guidelines in the “Tuition, fees and expenses” section of this bulletin. Courses assigned the IM grade will not be computed into the GPA.

Mark of marginal (M)
Courses assigned the M grade will not be computed into the GPA.

Mark of pass (P)
The mark of P may be assigned only in courses approved for such grading. This grade denotes satisfactory completion of course requirements. If course requirements are not met satisfactorily, a grade of F is assigned. Courses assigned the grade of F are not computed in the GPA. However, courses assigned the grade of F are computed in the GPA.

Mark of progress (PR)
A PR is assigned as an interim grade for certain continuing course requirements that run over the grade reporting periods. The mark of PR may be assigned only in courses approved for such grading. Courses assigned the PR grade will not be computed into the GPA.

Mark of withdrawn (W)
The mark of W indicates the student has officially withdrawn from the course or has been withdrawn for nonattendance. Students should refer to any school- or course-specific policies related to withdrawal dates. The last day to withdraw for the fall and spring semesters is the end of the 10th week of classes. Summer session students should check the summer Schedule of Classes for withdrawal dates.

Courses assigned the W grade will not be computed into the GPA. For further information see the Withdrawal from the university section of this bulletin.

Mark of withdrawn military (WM)
Courses assigned the WM grade will not be computed into the GPA. See the Defense crisis tuition relief, refund and reinstatement guidelines in the “Tuition, fees and expenses” section of this bulletin.

Grade-point average
The GPA is computed by dividing the number of grade points earned at VCU by the number of credit hours attempted at VCU. The grades of accepted transfer courses are not included in the computation of the VCU GPA. However, transfer grades are included in the computation of laudatory graduation honors.

Repeated courses
Because some programs do not allow students to repeat courses, any student planning to do so must first consult with his or her adviser, department chair or program head.

The semester credits attempted and the grade points earned for all attempts are included in computing the cumulative GPA. No matter how often a course is repeated, it may be counted only once as credits presented toward graduation.

If a student repeats a course in which a D or F was earned on the first attempt, the student can file the Historical Repeat Course Option form at any time during a semester prior to the awarding of the undergraduate degree. This form must be filed before the last week of classes in any semester so the cumulative GPA can be adjusted at the end of that semester. It is available online at www.enrollment.vcu.edu/rar.

In the case of courses that are no longer offered at VCU, students may take the established equivalent course at VCU and file the Historical Repeat Course Option form as described in the previous paragraph.

The grade is not excluded until the request is made. If, however, more than one D or F grade is received in the same course, only one of these grades will be excluded from the computation of the cumulative GPA.

Grades for all attempted courses remain on the student’s permanent record. Students may not repeat courses for which they have previously received transfer credit. A repeated course may be counted only once toward credits necessary for graduation. Before repeating a course, the student should consult with the adviser, department chair or program head.

Initiating the repeated course option by using the Historical Repeat Course Option form will not result in a change in previously earned academic statuses (warning, probation, suspension). Students who choose to repeat a course must do so before the awarding of their undergraduate degrees from VCU, or from any other college.
to which VCU course work is transferred. The student’s GPA at graduation will not be affected by repeating a course at any time after graduation.

Students who are eligible to file a historical repeat on a course that would change their academic standing have until the end of the add/drop period the following semester to file an ARAC petition with their school/college ARAC representative to request that the academic status be changed. Once the add/drop period the following semester has passed the student can still submit the historical repeat and have the grade point average changed, but the academic status will not be changed. For courses taken in the spring semester, the following semester is the summer session and the petition must be filed within one week (seven days) of when the first summer session starts.

Grade exclusion policy
This policy is applicable to former students enrolled in any undergraduate program at the university who:
1. Have not enrolled at VCU for five years or more
2. Are now entering an undergraduate program
3. Earn at least a 2.0 GPA on the first 12 semester hours completed upon return

Under this policy, eligible students may request that D and F grades previously earned at VCU be excluded from their total credits earned and GPA computation for the purpose of meeting scholastic continuance and graduation requirements.

All earned grades, including those excluded D and F grades, remain on the student’s academic record. Excluded grades must be approved by the student’s major department chair and by the dean of the school.

Initiating the grade exclusion option will not result in a change in previously earned academic statuses (warning, probation, suspension). Grades of DN and FN indicate that the letter grade is not computed in the GPA.

The grade exclusion policy may be used only once during a student’s enrollment at VCU and cannot be revoked by the student after approval is granted. A student who chooses to use this policy must do so before the awarding of his or her undergraduate degree.

Change of grade
A final grade may be corrected by the faculty member with proper submission of the Change of Grade Form to the chair of the department in which the course was taught. The chair will forward the form to the school’s dean, who will send it to the Office of Records and Registration. For grades awarded in the fall semester, the change of grade must be submitted by the department chair no later than 30 calendar days after the beginning of the following spring semester. For grades awarded in the spring semester or summer, the change must be submitted no later than 30 days after the beginning of the following fall semester. However, a change of grade that affects the student’s academic eligibility to enroll must be made during the add/drop period in the semester or summer session in which the student plans to continue attendance.

Grade review procedure
Initiating an appeal
Mediation
Grade review committee
Grade review hearing

Undergraduate and graduate students of VCU have a right to appeal course grades they consider to have been arbitrarily or capriciously assigned or assigned without regard for the criteria, requirements and procedures of the course stated in the syllabus or guidelines for assignments. Grades determined by actions under authority of the VCU Honor System may not be appealed through this procedure, nor may dismissals that have occurred as a result of correctly derived course grades.

Though the faculty has the responsibility for assigning grades on the basis of academic criteria, such grade designations can sometimes raise conflicts. Thus, while affirming the importance of maintaining standards of excellence and the integrity of the teaching/learning process, the university and its faculty also recognize that, on occasion, grades may be inappropriately assigned. Should such conflicts occur, students have a right to be fairly heard. When discrepancies occur concerning the grading process, the welfare and integrity of both faculty and students are equally important. This document is in no way intended to compromise the work of the faculty.

The faculty member (or members, in the case of a jointly taught course) bear the responsibility for specifying in writing at the beginning of each class section the formal requirements of the course and the weights that will be employed in determining the final course grade. The faculty member(s) shall apply relevant grading criteria uniformly to all members of the class.

Grades received through the grade review procedure are final and may not be appealed.

Initiating an appeal
When a student has evidence that a final grade has not been assigned in accordance with the stated criteria, the student shall discuss it first with the faculty member. The faculty member will explain how the final grade was determined. If the student continues to feel that the grade was incorrectly assigned, a written appeal may be submitted to the chair of the department in which the course was taught. Students appealing grades assume the burden of proof. The appeal shall state and support with all available evidence the reasons why the student believes the grade should be changed. For grades awarded for the fall semester, the written intent to appeal must be submitted no later than 14 calendar days after the beginning of the spring semester. For grades awarded for the spring semester or summer sessions, the written intent to appeal must be submitted no later than 14 calendar days after the first day of the fall semester. For schools that have a summer session or other less common sessions, school policies may specify other deadlines to ensure a timely appeal. Appeals submitted after the deadline will be heard only in exceptional cases, as determined by the appropriate vice president.

The grade issued by the faculty member shall remain in effect throughout the appeal procedure. In instances in which the failing grade is in a prerequisite course in which safety or well-being of clients, patients or the public is involved, the student shall not be allowed to enroll in the subsequent courses in which safety and well-being may be at issue until and unless the appeal is resolved in the student’s favor. In these cases, the student who wishes to appeal is advised to do so as soon as possible and it is the responsibility of the school to move the appeal process expeditiously.

Mediation
The chair of the department shall attempt to mediate an amicable solution within two weeks of receipt of the written appeal. If the complaint is not resolved, the chair shall forward the student’s appeal to the dean (or appropriate associate/assistant dean)* of the school in which the course was taught. The chair also shall submit to the dean in writing the recommendation made to the two parties regarding the appropriateness of the grade. If the grade being appealed was assigned by the chair of the department, the dean shall assume the mediation responsibility. If the grade being appealed was assigned by the dean, the mediation responsibility will fall to the appropriate vice president.

* In instances in which the dean of the school chooses for the appropriate associate/assistant dean to manage the grade appeal, the term “associate/assistant dean” may be substituted for the term “dean” throughout this document.

Grade review committee
The dean shall form a grade review committee and designate the chair. The committee has the option of either raising the grade or leaving the grade unchanged.

The committee shall consist of one non-voting faculty chair, two faculty members and two students selected by the dean from disciplines whose methods and techniques of teaching and testing are as similar as possible to those of the discipline of the course in question. If the course is multidisciplinary and the instructor(s) whose grade is being appealed does not belong administratively in the school in which the course was taught, the committee shall have at least one of the faculty members from the instructor’s school.

Either party may challenge the committee’s membership for cause within a week of being informed of the membership. The dean shall determine if there is sufficient cause to remove the challenged committee member.

The committee shall meet initially to examine the written appeal and the department chair’s recommendation. It can require the faculty member(s) to turn over to the committee grade records for that class or section and any tests, papers and examinations by students of that class that they may possess. The committee may require the student bringing the appeal to turn over all tests, papers or other evaluations that have been returned and all existing evidence that an improper grade was awarded. The committee shall disregard any claim that a test or paper
that has been returned to a student was unjustly graded unless that test or paper is produced for the committee’s inspection.

After examining the materials, the committee may, by a majority vote, decline to hear an appeal that it judges to be patently without merit. Otherwise, the committee will authorize its chair to arrange a date for a hearing. The chair of the committee shall meet with each party prior to the hearing to explain the rules and procedures of the hearing.

Grade review hearing
 Grade appeal hearings will be open, closed or partially open (i.e., a few close associates of each party may attend) by agreement of the appealing student and the faculty member(s) and the chair of the committee of the appealing student. In case of disagreement, the committee shall decide. The chair has the option to declare closed an open or partially open hearing in cases of disruption or in order to ensure necessary confidentiality.

Both parties may have with them an adviser of their choice (who may not be an attorney), with whom they may consult but who will not participate in the questioning of witnesses and presentation of evidence unless the opposing party and chair agree to it. The committee shall ask any member of the VCU community whose testimony it deems relevant to be available at an agreed-upon time to give testimony.

Either party may present additional witnesses as long as they remain within their allotted time and their testimony is directly relevant to the course at issue. Performance in other courses is not relevant. Witnesses other than the appealing student and the faculty member(s) shall be excluded from the hearing except when testifying. A hearing shall begin with the student outlining the reasons for the appeal and all evidence that exists of an improper grade. The faculty member(s) shall then explain the criteria used for the original grade assigned. Each party will have a time period not to exceed two hours in which to present a position.

The committee shall determine in executive session whether the grade was justified according to the course in which the grade was given. If the evidence is that the grade was determined according to the stated objectives, criteria and grading procedures of the course, the committee shall uphold the grade. The committee should also take into account that purposes, methods, requirements and grading criteria differ from course to course and that difference is a legitimate characteristic of a university and its faculty. Further, the grade in some courses may be partly or solely determined by a faculty member’s professional judgment, which in itself cannot be overthrown without evidence that the judgment was arbitrarily or capriciously rendered. The committee shall consider (a) whether the faculty member(s) articulated the criteria to be used (some criteria may be implicit within the discipline), (b) whether those criteria were actually used to determine the final grade and (c) whether the results of the evaluation were communicated to the student.

No grade may be changed except by a vote of at least three out of four voting members. When the committee has reached a decision, the committee chair shall submit to the dean in writing the decision and the reasons for it. The dean shall communicate in writing the decision of the committee to the appealing student, faculty member(s) and the department chair. If the grade has been changed, the dean also shall notify the registrar.

The evidence, proceedings and the final decision of the committee shall remain confidential. All documents shall be held in a confidential file by the dean for one year. The party from whom a document was obtained may request that it be returned at the end of the year. All documentation not returned shall be destroyed by the dean one year later.


Please note: Any student who has questions about initiating an appeal using the grade review procedure should call the office of the dean of his or her school or college.

Transcripts
A transcript is a copy of the student’s academic record. All official transcripts are embossed with the university seal.

Official transcripts of student academic records are issued by the Office of Records and Registration only upon the written request of the student. Due to federal privacy laws, a signature is required to release a transcript; therefore the office cannot fulfill e-mail or telephone requests for transcripts. The request should be made at least one week before the transcript is needed. All transcripts are $5 each. Currently enrolled students can obtain unofficial copies of transcripts via the Web using myVCULogin at https://my.vcu.edu.

An official transcript is issued only after the student has paid all university bills.

Transcript requests signed by the student may be submitted in person at the Student Services Center in Harris Hall, 1015 Floyd Ave., in Room 1100 on the Monroe Park Campus, or in VMI Building, 1000 E. Marshall St., in Room 323 on the MCV Campus; or submit by mail to the Office of Records and Registration, P.O. Box 842520, Richmond, VA 23284-2520 (for the Monroe Park Campus), or Office of Records and Registration, P.O. Box 980277, Richmond, VA 23298-0277 (for the MCV Campus). Students and recent alumni may request an official transcript and pay by credit card by logging in to etervices and following the links to “Student/Student Records.”

Degree evaluation
This computerized report tracks the completion of a student’s declared degree by course and requirement. It outlines in concise form the university core, general education, major, collateral requirements and electives for a student’s degree program (and concentration), and the way in which the student is completing those requirements. This report is not intended to replace contact with academic advisers. It will, however, provide accurate, up-to-date information to assist students and advisers in making wise academic choices.

Continuance in academic programs
Monroe Park Campus programs
Definition of good standing
Academic warning
Academic probation
Academic suspension

MCV Campus programs
Definition of good standing

A student who is enrolled at VCU is in “good standing” until such time the student is placed on academic warning, probation or suspension. Students should consult their program of study regarding specific academic standards constituting good standing in the program.

Academic warning
A student is placed on academic warning when the student’s cumulative GPA falls below 2.0 (grade C) at the conclusion of any semester of attendance — fall, spring or summer. Notification of warning appears on the student’s academic record. A degree-seeking student on academic warning may not enroll in more than 14 credits per semester except under unusual circumstances and with the permission of the dean or designee of the school or college in which the student is enrolled. A nondegree-seeking student on academic warning may not enroll for more than 11 credits per semester of attendance. A student remains on academic warning for one semester of attendance, at the end of which time the student must obtain a cumulative GPA of at least 2.0. Failure to achieve this GPA results in academic probation.

Academic probation
A student is placed on academic probation when the student’s cumulative GPA falls below 2.0 for two successive semesters of attendance, including summer sessions. Notification of probation appears on the student’s academic record. A degree-seeking student on academic probation may not enroll in more than 14 credits per semester of attendance except under unusual circumstances and with the permission of the dean or designee of the school or college in which the student is enrolled. A nondegree-seeking student on academic probation may not enroll in more than 11 credits per semester of attendance. A student who achieves a cumulative GPA of at least 2.0 is removed from academic probation. Failure to achieve a 2.0 semester GPA while on probation results in academic suspension.

Academic suspension
A student is placed on academic suspension when the student’s cumulative GPA falls below 2.0 for two successive semesters of attendance and the following semester of attendance GPA falls below 2.0.

Notification of suspension appears on the student’s academic record. The student also receives a letter from the Office of Records and Registration stating the
conditions of the suspension. Academic suspension indicates the student has a record of continued unsatisfactory progress.

A student on a first academic suspension may not enroll at the university for two consecutive semesters, including the summer session. Course work taken at another institution while the student is under academic suspension from VCU is considered part of the criteria for readmission, but the course work is not used to increase the VCU cumulative GPA. If the student is readmitted, the course work will be evaluated according to regular procedures.

A student may apply for readmission to VCU for the semester following completion of the suspension period. A student readmitted after suspension enrolls under the academic probation status and is subject to the provisions of that status. If a student readmitted after suspension fails to obtain a semester GPA of 2.0 in any semester before achieving a cumulative GPA of at least 2.0, the student is placed on a five-year suspension. The student may be considered for readmission after a minimum five-year separation from VCU.

Although a student may be approved for readmission to VCU, the student is not automatically eligible to receive federal or state financial aid. See the “Financial Aid” section of this bulletin for information about Satisfactory Academic Progress (SAP) standards and suspension of aid eligibility. Detailed information about the SAP appeals process can be found on the VCU Office of Financial Aid Web site at www.enrollment.vcu.edu/finaid.

For Readmission guidelines, see the “Admission to the University” section of this bulletin.

MCV Campus programs
Warning, probation and suspension are defined by the program of study. Consult the program adviser for further details. Students dismissed from an MCV Campus program will be placed in the undeclared major. Students who wish to pursue a different major should follow the process outlined under the Change of academic program section in this bulletin.

The individual health science schools recognize and support the statements set forth by the licensing boards of the respective health professions as they relate to examination, licensure and the practice of each profession. When applicable, these standards may be used in determining a student’s eligibility for continuance in or readmission to the university.

Termination of enrollment
The university reserves the right to terminate the enrollment of any student for unlawful, disorderly or immoral conduct, or for persistent failure to fulfill the purposes for which he or she was matriculated. Any students whose relations are so severed forfeit all rights and claims with respect to the institution.

In addition to dismissal for failure to comply with standards of conduct described in the Rules and Procedures of VCU and the VCU Honor Code, a student may be dismissed from the academic unit in which he or she is enrolled for failure to meet academic requirements prescribed by his or her academic unit or failure to exhibit the attitudes and skills deemed necessary to function within the chosen professional practice. VCU recognizes its responsibilities to the health professions and to the consumer of health services. Therefore, any action by a student considered to be unprofessional conduct according to the code of ethics and the laws and regulations governing the student’s chosen profession shall constitute cause for disciplinary action.

Unprofessional conduct includes, but is not limited to:
1. Fraud or deceit in gaining admission to the university, i.e., false or obviously misleading representations on the admissions application
2. An act that violates the established legal standards regarding conduct of one person toward society, i.e., stealing, lying, cheating and slander
3. Conviction of a felony involving moral turpitude

Graduation process
Graduation application
Graduation checklist
Graduating with honors
Special note for graduating financial aid recipients

Graduation application
VCU confers degrees in May, August and December. A commencement exercise is held in May for May graduates only. A commencement exercise is held in December for August graduates and December graduates. Each student who expects to complete the degree requirements by the end of a semester or summer session must file an application for the degree in accordance with dates published on the university academic calendar. Candidates who do not graduate at the end of the semester for which they have applied must reapply.

Students who may have enough credits to be eligible to graduate will be notified by email of the graduation process each semester. The email will contain submission deadlines and steps to begin the graduation checkout and application process. Eligible students should submit their degree applications by the dates indicated in the email and noted in the university academic calendar, which is available on the Web at http://academiccalendars.vcu.edu. Students should schedule a conference with an adviser well in advance of the deadline and should remember that the application also requires approval by the department chair and dean.

Students planning to graduate in the current semester should proceed as follows:
• Complete the Apply to Graduate procedure on e-Services. The Undergraduate Graduation Application will be provided during this process.
• Complete the Undergraduate Graduation Application according to the instructions provided. (These forms are provided in PDF format so that students can complete the forms online and print them. Adobe Acrobat Reader is required.) A separate set of graduation forms must be completed and submitted for each program from which students intend to graduate.

No degrees will be conferred unless students make formal application to graduation.

Degrees will be awarded and diplomas issued in a current semester only. Students who do not submit/complete their applications to graduate in the semester in which they actually complete their programs will be awarded their degrees in the semester in which they apply to graduate. In such cases, a text notation will be added to the transcript to indicate the date that course work for the degree was completed.

Graduation checklist
The total number of semester credits required for graduation depends upon the degree program. Specific information may be found under degree program descriptions. In addition to the specific requirements listed by the college/school/department, the following graduation checklist for undergraduate students summarizes all general requirements for graduation and issuance of a diploma.

• Overall undergraduate GPA must be 2.0 or greater.
• Student must have completed 25 percent of the semester-hour credits required for the bachelor’s degree in residence at VCU, including at least 30 of the last 45 credits.
• Student must have earned a minimum of 120 credits, including transfer credits
• All grades of Incomplete (I), Continued (CO), Progress (PR), Not Recorded (NR) and No Grade (NG) must be converted to final letter grades no later than the last day of class of the semester in which the candidate plans to graduate.

Students are reminded to complete a final check of their academic records before they exit the university to ensure that all temporary grades have been posted. Requests for changes to the academic record must be made within the first six months following graduation, but this requirement may be superseded by other university-specific deadlines (e.g., those governing requests for a change of grade). Commonwealth of Virginia record-retention requirements may affect the university’s ability to address requests for changes to the academic record. Students must settle all financial obligations to the university prior to the issuance of a diploma.

Graduating with honors
Dean’s list
The dean’s list is a recognition of superior academic performance. A student is automatically placed on the dean’s list for each semester in which a semester GPA
of at least 3.5 is attained, based on a minimum of 12 semester credits, excluding courses graded credit/noncredit, with no grade below C. A notation is placed on the student’s academic record. Students earning marks of I or PR are ineligible for the dean’s list for the semester in which these grades were earned.

Laudatory honors
Candidates for a baccalaureate degree who complete a minimum of 45 credits at VCU may qualify for graduation honors. Cum laude is awarded for a 3.30 to 3.59 GPA, magna cum laude is awarded for a 3.60 to 3.89 GPA and summa cum laude is awarded for a 3.90 GPA or better, at the time of graduation.

Calculation of the GPA for honors determination is based on grades received for all courses taken for credit at VCU, as well as for credits accepted for transfer at VCU. However, to qualify for graduation honors, a student’s GPA for courses taken for credit at VCU must be at least as high as the minimum required for the specific honor bestowed. Recognition of graduation honors is made on the student’s diploma, permanent record and in the commencement program (because of the early publication of the commencement program, the honor status from the last semester prior to graduation will be reflected in the commencement program).

Students who have participated in the Honors College and who have met requirements of that program may graduate with “University Honors.” Please refer to the “Honors College” section of this bulletin for more information.

Special notes for graduating financial aid recipients
If a student plans to continue enrollment at VCU after graduation and wants financial aid, he or she must apply and be accepted as a degree/certificate-seeking student and enroll at least half time to meet financial aid enrollment requirements.

If a student received federal loan funds during enrollment at VCU, he or she may be required to complete a loan exit counseling session as listed below. The student’s diploma will not be released until he or she completes this required obligation.

Exit counseling required
Exit counseling is required for students receiving the following loans: Federal Perkins Loan, Health Professions Student Loan, Nursing Student Loan, Loan for Disadvantaged Students, Primary Care Loan and University Long-term Loan. Borrowers will be notified about exit counseling sessions during the semester in which they graduate or drop below half-time enrollment.

Exit counseling optional
Exit counseling is optional for students receiving a Federal Direct Loan (subsidized or unsubsidized). Exit counseling instructions are available on the VCU Office of Financial Aid Web site at www.enrollment.vcu.edu/finaid.

Awarding degrees posthumously
Recipients for posthumous degrees should meet the following conditions:

• The student was in good academic standing at the time of his or her death.
• There were no disciplinary actions pending against the student.
• The death was not a result of illegal behavior on the part of the student.
• The student earned at least 30 credits at VCU and was within the last 30 credits of graduating.

Graduate and professional programs will determine equivalent progress of students toward their graduate or professional degrees.

A notation that the degree was awarded posthumously will be made in the commencement program and on the transcript, but not on the diploma.

Commencement participation policy
When a student has submitted a degree application for spring graduation but does not meet degree requirements due to extenuating circumstances, the student’s dean may permit the student to participate in commencement exercises. Permission may be granted only when six or fewer credits are lacking for degree completion and the student demonstrates his or her intent to complete the needed credits by the end of the summer session.

When such an exception is made, the dean confirms the following conditions to the student:

• Participation in the commencement ceremonies does not mean the student has been awarded a degree.
• The degree will be awarded in the semester or summer session in which all degree requirements have been met.
• The exemption is made only to accommodate the student’s request and does not obligate VCU to ultimately grant a degree unless all requirements and conditions have been met.

MCV Campus graduation candidates for degrees to be conferred at the close of the spring semester must be present at the universitywide graduation ceremony to receive their degrees. No individual may be exempt from this regulation unless excused by the dean of his or her school.

Appeal to waive an academic regulation, Academic Regulations Appeals Committee
The Academic Regulations Appeals Committee considers appeals for exceptions to undergraduate program academic regulations listed in this bulletin. The committee — composed of faculty and administrators from each school and the college, and representatives from the Office of Records and Registration, Division of Community Engagement and the Division of Student Affairs and Enrollment Services — is a standing committee of the Office of Academic Affairs.

Undergraduate students who wish to petition the university for a waiver of the regulations in this bulletin may do so through the Academic Regulations Appeals Committee. Students who have been accepted to the graduate portion of a five-year bachelor/master’s program may also need to make an appeal through the Graduate School. Examples of typical petitions are requests for retroactive withdrawal, waiver of the continuance policy following a suspension or a waiver of the rule requiring that the last 25 percent of a program be earned in residence at VCU. Students may petition for a past semester within three years, but cannot ask for waivers after having graduated. In exceptional circumstances any member of the Academic Regulations Appeal Committee and/or academic dean may refer a case to the provost who has the right but not the obligation to consider remanding it back to the committee for further review.

To begin the appeal process, students should contact the Academic Regulations Appeals Committee representative in the dean’s office of their school or college; nondegree-seeking students should contact the University College at (804) 827-8648. The student then works with the representative to prepare the petition following guidelines established by each school and the college. The first step is for the student to prepare a letter that details the extenuating circumstances supporting the student’s belief that the university should waive its regulations and grant the request. All circumstances cited in the student’s letter must be documented, and the student is responsible for gathering all the necessary documentation. Examples of documentation include medical records, police reports, death certificates and employer reports. Things that may not be used as documentation include letters from parents, friends or relatives. Any petition that does not have the required documentation will not be heard.

After the Academic Regulations Appeals Committee representative receives the student’s letter and all necessary documentation, he or she will prepare a petition cover sheet and, if appropriate, gather pertinent information from faculty. When the petition is complete, it will be presented to the committee at one of its semimonthly meetings. Requests are granted or denied by a majority vote of the committee. Decisions are effective immediately, and students are notified by their representative. All committee procedures are confidential and ensure the right of privacy of the student.

Since a request to waive a regulation is itself an appeal, committee decisions are final, and there is no further appeal within the university. However, if new documentable information is provided, petitions may be brought back before the committee. A rewritten student letter does not constitute new documentation. The representative will request that the petition be reheard based upon the new information and the committee will vote on that request.

Certain exceptions may affect current and future financial aid. Students should consult with a financial aid staff member before submitting an appeal.

Consumer information
The federal Higher Education Act of 1965, as amended, requires that institutions of higher education disclose certain consumer information to current students, prospective students, current employees and/or prospective employees. This consumer information can be found online at www.consumerinfo.vcu.edu and includes information about:

• Financial aid
• General information about VCU
• Student Right-to-know Act completion and graduation rates for general student body and student athletes
• Equity in Athletics Disclosure Act athletically related expenses and student aid
• Drug and alcohol abuse prevention
• Campus security
• Family Educational Rights and Privacy Act student rights with respect to educational records

Paper copies of all of the information listed on the Consumer Information Web site are available upon request.

Contacts
Office of Academic Affairs
901 West Franklin Street
P.O. Box 842527
Richmond, Virginia 23284-2527
(804) 828-6162
Fax: (804) 828-1887
www.vcu.edu/provost

University College
900 Park Avenue
P.O. Box 842002
Richmond, Virginia 23284-2002
(804) 827-8648
Fax: (804) 828-6048
www.vcu.edu/uc

Office of Records and Registration
Harris Hall
1015 Floyd Ave.
P.O. Box 842520
Richmond, Virginia 23284-2520
(804) 828-1349
Fax: (804) 828-8121
www.vcu.edu/enroll/rar

Effective bulletin
The Undergraduate bulletin documents the official admission and academic rules and regulations that govern education in the undergraduate degree programs at VCU. In-depth descriptions of each undergraduate degree program are provided in the individual school and program sections of this bulletin, available in PDF format. Updates to the online bulletin are made throughout the year, while the bulletin archives contain the PDFs that serve as effective bulletins for enrolled students.

The bulletin for the academic year a student enters or re-enters a degree program identifies the curriculum degree requirements for that student. Students in continuous enrollment may fulfill the curriculum degree requirements of the bulletin for the year they entered VCU or choose to be subject to the curriculum degree requirements articulated in a subsequent bulletin. Subsequent bulletins can be chosen throughout a student’s academic career. In either case, students must fulfill all curriculum degree requirements listed in the bulletin they choose.

A student’s effective bulletin will remain in effect until the degree is awarded. Change in academic program (major, concentration, minor) will not result in a change in effective bulletin unless the student chooses to be subject to the curriculum degree requirements articulated in a subsequent bulletin. Students readmitted to the university will fall under the bulletin in effect at the time of readmission. At the discretion of the school dean, department chair or program head, degree requirements may be waived and/or previously taken courses may be substituted for requirements in effect at the time of readmission.

The contents of this bulletin represent the most current information available at the time of publication. However, during the period of time covered by this bulletin, it is reasonable to expect changes to be made with respect to this information without prior notice. Thus, the provisions of this bulletin are not to be regarded as an irrevocable contract between the university (or any of its divisions) and the student.

All rules and regulations set forth in this bulletin will apply until further notice. The university reserves the right to make changes including, but not limited to, changes in courses of study, fees, rules, regulations, programs, faculty and staff, and classification of students, whenever university authorities, in their sole discretion, deem it appropriate, expedient or wise to do so.
Undergraduate Bulletin
Division of Community Engagement
Office of Continuing Studies and Special Programs

The university provides numerous opportunities for adult education, off-campus instruction and professional development through the Office of Continuing Studies and Special Programs. Continuing studies programs offer the same course work and academic credit as traditional university courses and are fully degree-applicable within the normal standards of VCU’s college and schools.

The office attempts to address the educational and professional training needs of the community by providing flexible, cost-effective instruction that returns valued and needed knowledge into the community.

Program examples include the Nonprofit Learning Point certificate program, profession-specific and introductory Spanish courses, specialization and recertification programs for teachers, off-campus degree programs including the R.N. to B.S.N. program, the NOVA M.S.W. program, and advanced-study courses for gifted high school students.

For more information, call (804) 828-8819 or visit www.community.vcu.edu.

Off-Campus Graduate Art

Master of Interdisciplinary Studies in Interdisciplinary Art

The Master of Interdisciplinary Studies in Interdisciplinary Art degree is jointly administered by the School of the Arts and the Division of Community Engagement. It is not the equivalent of a Master of Fine Arts degree, but is an additional option for qualified persons, especially art teachers, who are interested in studio art classes. Classes are offered in public school art rooms from Fairfax County to Virginia Beach, in the late afternoon during the regular school year and in all-day workshops during the summer. The M.I.S. degree requires the completion of 39 graduate credits, including at least nine and no more than 15 credits in each of two focus areas. Focus areas include, but are not limited to, crafts, computers and the arts, mixed media, painting, printmaking, drawing, and sculpture. In addition, the student must complete from three to 15 credits of art electives and six credits of an approved final project, including a graduate exhibition and a final paper. For more information, call (804) 828-8819 or visit www.community.vcu.edu.

Nonprofit Learning Point

Since 1993, VCU has offered off-campus graduate art classes in locations from the Washington, D.C., area to Tidewater. Classes are open to all qualified students (persons with undergraduate degrees in art or equivalent experience), but are particularly designed for art teachers interested in license renewal, a graduate degree program or personal enrichment. During the fall and spring semesters, classes meet one evening per week, usually from 4:30 to 8:30 p.m. In the summer semester, classes are scheduled for 10 all-day workshops over a two- or three-week period. A degree program, the Master of Interdisciplinary Studies in Interdisciplinary Art, is offered, but students need not be in a degree program in order to take classes. For more information, call (804) 592-2600 or visit www.community.vcu.edu.

VCU America Reads Program

The VCU America Reads Program places college work-study students in local elementary schools to provide comprehensive reading support to students who are below grade level in reading. The program works in partnership with Richmond City Schools as well as schools in the surrounding counties to identify elementary school children who are in need of extra assistance. Reading support is provided at
partner schools during the normal school day as well as during academically focused after-school programs. Program applications are available throughout the year at the following locations:

- Community Programs Office located at 1103 W. Marshall St.
- VCU Career Center and Student Activities Center located in the University Student Commons, 907 Floyd Ave.
- VCU Office of Financial Aid located at 1015 Floyd Ave.

For more information, visit www.community.vcu.edu. Applications may also be downloaded at the America Reads Web site at www.ed.gov/iniits/americareads or they can be mailed upon request by calling (804) 828-1907.

VCU AmeriCorps

Established in 1995, the AmeriCorps program at VCU has an educational focus with the goal of helping improve the literacy skills of local children and families. Reading by third grade has been identified by the Richmond community as a critical preventive strategy in addressing the health and safety needs of children in the metro area. VCU AmeriCorps members address this need by providing comprehensive reading support to elementary school students who are struggling academically. Members also enhance family literacy skills and parent involvement at partner schools by lending support to existing services as well as developing new programs to meet specific needs. Applications are available beginning in March at the following locations:

- Community Programs Office located at 1103 W. Marshall St.
- VCU Career Center and Student Activities Center located in the University Student Commons, 907 Floyd Ave.
- VCU Office of Financial Aid located at 1015 Floyd Ave.

For more information, visit www.community.vcu.edu. Applications can also be downloaded at the AmeriCorps Web site at www.americorps.gov, or applications can be mailed upon request by calling (804) 828-1907.

Carver-VCU Partnership

In the spirit that partnerships, not fences, promote safe and nurturing communities, VCU has created a partnership with its northern-boundary neighbor, the Carver community. The Carver-VCU Partnership strives to create a shared urban community with a commitment to improving the neighborhood’s quality of life including its health, community development, youth development, and safety while extending the experience of the community into the classroom and the university. For more information, call (804) 827-1904 or visit www.community.vcu.edu.
Affairs
Office of the Associate Vice Provost and Dean of Student Affairs

Henry G. Rhone
Vice Provost for Student Affairs and Enrollment Services

Reuban B. Rodriguez
Associate Vice Provost and Dean of Student Affairs

Delores Taylor
Associate Vice Provost for Enrollment Services

Charles Klink
Assistant Vice Provost for Student Affairs and Enrollment Services

Napoleon Peoples
Associate Dean of Student Affairs, MCV Campus

The university offers students a wide variety of services, facilities and resources, many of which are the administrative responsibility of the Division of Student Affairs and Enrollment Services.

Office of the Vice Provost for Student Affairs and Enrollment Services
Office of the Associate Vice Provost and Dean of Student Affairs
Office of the Associate Vice Provost for Enrollment Services
Office of the Associate Vice Provost and Dean of Student Affairs
Office of the Associate Dean of Student Affairs, MCV Campus

Office of the Vice Provost for Student Affairs and Enrollment Services

Henry G. Rhone
Vice Provost for Student Affairs and Enrollment Services

The Office of the Vice Provost provides leadership and direction for the Division of Student Affairs and Enrollment Services. The Division of Student Affairs and Enrollment Services is a dynamic division promoting academic success and development of the whole person. The division seeks to create a student-centered culture promoting community, encouraging engagement and developing students to be contributing citizens in a global and diverse society through its programs, services, facilities and activities.

The Division of Student Affairs and Enrollment Services is comprised of departments promoting the intellectual, cultural, personal, social, moral, financial, physical and psychological development of Virginia Commonwealth University students. Departments in the division include: Office of the Associate Vice Provost and Dean of Student Affairs, Monroe Park Campus; the Office of the Associate Dean of Student Affairs, MCV Campus; the Office of the Associate Vice Provost and Dean of Student Affairs; Office of the Associate Vice Provost for Enrollment Services; Office of Undergraduate Admissions; University Student Commons and Activities; the University Career Center; University Counseling Services; Disability Support Services; Financial Aid; University Student Health Services; Office of Multicultural Student Affairs; Records and Registration; Recreational Sports; Office of Judicial Affairs and Academic Integrity; Student Accounting; Student Media; Financial Management and Technology; and Residential Life and Housing.

The division provides administrative support for key policies of the university, including the VCU Honor System and the Rules and Procedures. Most Division of Student Affairs and Enrollment Services publications are available on the Web at www.students.vcu.edu.

The Office of the Vice Provost for Student Affairs and Enrollment Services is located in the Sitterding House at 901 Floyd Ave., P.O. Box 843017, Richmond, VA 23284-3017; telephone: (804) 828-1244.

Office of the Associate Vice Provost and Dean of Student Affairs

Reuban B. Rodriguez
Associate Vice Provost and Dean of Student Affairs

The Office of the Associate Vice Provost and Dean of Students is actively involved in understanding the needs of students, improving the quality of student life, supporting student success, promoting leadership development, and disseminating important information for students. The office provides services and support to students through a wide range of programs, activities and resources. The office assists students in solving problems and advocating for students when appropriate. The office provides information and referral to students, faculty, staff and parents on a variety of student-related issues. The office provides oversight for the administration of the university’s disciplinary procedures and the honor system.

The dean sits on a number of university committees, participates in orientation activities, provides supervision for several departments of the Division of Student Affairs and Enrollment Services and serves as a key administrator for several major policy statements of the university including the VCU Honor System.

Students, parents of students and staff who have issues they wish to discuss or who are interested in various programs and opportunities should visit the dean’s office, located in the Sitterding House, 901 Floyd Ave., P.O. Box 843017, Richmond, VA 23284-3017; telephone: (804) 828-8940; e-mail: vcudean@vcu.edu.

Office of the Associate Vice Provost for Enrollment Services

Delores Taylor
Associate Vice Provost for Enrollment Services

The Office of the Associate Vice Provost for Enrollment Services provides leadership in the development and implementation of the university’s enrollment plans, policies, related service programs, leadership and coordination in marketing and undergraduate student recruitment, coordination in enrollment and recruitment initiatives with the individual schools, college, graduate school and international education.

The associate vice provost has planning, policy and administrative oversight responsibilities for a wide range of academic and student services provided by the offices of Undergraduate Admissions, Financial Aid, Records and Registration, and Student Accounting. Functions and services provided by the various enrollment services units are described in this section and in the “Admission to the University,” “Tuition, fees and expenses,” and “Academic Regulations” sections of this bulletin.

The Office of the Associate Vice Provost for Enrollment Services is located in the Sitterding House, 901 Floyd Ave., P.O. Box 843017, Richmond, VA 23284-3017; telephone: (804) 827-8737; e-mail: wglee@vcu.edu.

Office of the Assistant Vice Provost for Student Affairs and Enrollment Services

Charles Klink
Assistant Vice Provost for Student Affairs and Enrollment Services

The Office of the Assistant Vice Provost for Student Affairs and Enrollment Services provides assistance to the vice provost for student affairs in the overall administration of the Division of Student Affairs and Enrollment Services. This office is actively involved in understanding students and their needs, improving the quality of student life, and collecting and disseminating information important to students and to the university.

The assistant vice provost serves as the division ombudsman in addressing and resolving student issues and concerns inhibiting success at the university, provides leadership for assessment and professional development activities for the division, and oversees a number of initiatives focused on utilizing external and internal resources to support and recognize student success. The assistant vice provost provides supervision for several departments in the Division including the University Career Center, Disability Support Services, University Counseling Services and Student Media.

The Office of the Assistant Vice Provost for Student Affairs and Enrollment Services is located in the Sitterding House at 901 Floyd Ave., P.O. Box 843017, Richmond, VA 23284-3017; telephone: (804) 828-7525; e-mail: cjklink@vcu.edu.

Office of the Associate Dean of Student Affairs, MCV Campus

Napoleon Peoples
Associate Dean of Student Affairs, MCV Campus
The Office of the Associate Dean works closely with the Office of the Associate Vice Provost and Dean of Student Affairs in serving as a resource for students, parents, faculty and staff. The associate dean serves as the primary liaison between the organized student body on the MCV Campus and the university, providing coordination and leadership for student affairs and related staff.

The associate dean serves as the faculty adviser to the MCV Campus Student Government Association. The associate dean represents the Division of Student Affairs and Enrollment Services on several university-wide committees and also participates in the general orientation sessions for each school on the MCV Campus. The associate dean maintains an open-door policy and will advise students, parents, faculty and staff on university-related issues or procedures.

The associate dean’s office is located in the Hunton Student Center, Suite 205, 1110 East Broad Street, P.O. Box 980004; telephone: (804) 828-0525; e-mail: npeoples@vcu.edu.

University Student Commons and Activities

Timothy L. Reed
Director
www.usca.vcu.edu

The facilities, services and programs of University Student Commons and Activities (USC&A) are designed and implemented to bring together all members of the Virginia Commonwealth University community — students, faculty, staff, alumni and guests — thereby contributing to intellectual, emotional and social growth through informal interaction.

Facilities

Programs

Services

USC&A manages three student centers on the Monroe Park and MCV Campuses of VCU.

The University Student Commons is the main student-life facility for the Monroe Park Campus. The Commons, located in the heart of VCU’s Monroe Park Campus, is a great place to meet friends, host an event, get involved, or study. The Park Place Food Court, Commons Café and Commons Convenience provide a wide variety of dining options. Break Point, located in the Lower Level of the Commons, is the university's game room with pool tables, arcades and Thunder Bowl. The Commons is home to the Student Organization Center, Off-campus Student Services, University Career Center, University Counseling Services, Disability Support Services, the Office of Multicultural Student Affairs, and the Student Government Association.

The Hunton Student Center and the Jonath L. Larrick Student Center are both located on the MCV Campus. Hunton Student Center is a great place to study or grab a bite to eat between classes. The renovated 1841 church building has a state-of-the-art learning center, managed by VCU Libraries, along with spacious study areas on two floors including private group-study rooms. Also located in Hunton are the offices for the Associate Dean of Students, MCV Student Government Association, the Hideaway Café, and a student recreation area. Larrick is a multipurpose room used for dances, lectures, receptions, and other functions. The first floor of Larrick Student Center also serves as a student dining facility. Information centers can be found at both the Commons and Hunton Student Center. A complete list of services and programs that these facilities offer is available online at www.usca.vcu.edu.

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Programs

USC&A offers a wide variety of programs and leadership opportunities for students on both the Monroe Park Campus and MCV Campus. The following programming offices are included in the USC&A: Monroe Park Campus and MCV Campus Programs Office, Fraternity and Sorority Life, Leadership Development, Student Organization Services, and Volunteer Services. Through these offices, several university traditions and major events are coordinated. These events include: Welcome Week, Student Organization-Volunteer Organization Fair, Jazz on the Green, Fraternity and Sorority Recruitment, RamMadness, Fall Fest, Homecoming, Speak from the Heart Speaker Series, Greek Week, STRUT Fashion Show, Student Organization Awards Ceremony, Saturday Volunteer Specials, and Leadership and Service.

Students are encouraged to participate in these university traditions along with participating in other programs and events offered during the week and weekends. A complete listing of programs and events is available online at www.usca.vcu.edu.

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Services

USC&A offers a wide variety of services for students and the entire VCU community including Information Services, Off Campus Student Services, Student Organization Services, and Volunteer Services.

Information Services staff provide campus directions and information about programs or events. More information can be obtained by calling (804) 828-1981 or visiting the Web at www.usca.vcu.edu/information.

Off Campus Student Services offer a variety of ways to assist and educate those who drive, ride, walk or bus to campus. OCSS provides a Web-based housing search system, ride-share assistance, a care emergency tool kit for check-out, bicycle registration, educational programs and coin operated rental lockers. More information on Off Campus Student Services is available online at www.usca.vcu.edu/offcampus.

The Student Organization Service Center offers mail boxes, computer work stations, storage, work rooms, financial assistance for student organizations, general planning, and advising for all student organizations. SOSC staff assist students in identifying student organizations of interest. Volunteer Services provides information on opportunities to serve the greater Richmond community through volunteer experience. More information on volunteer opportunities is available online at www.usca.vcu.edu/studentorgs/volunteer.htm.

University Career Center

Susan Story
Director
www.students.vcu.edu/careers

The University Career Center assists students and recent alumni to identify and achieve their career goals. Career Center staff work with students to help them explore career options, decide on career directions and develop sound strategies for realizing their career goals.

The Career Center offers a career library of more than 600 books and publications. Students have access to employer literature, recruiting brochures and graduate and professional school publications.

Career counseling sessions are offered by appointment using assessment tools such as the Strong Interest Inventory, the Self-Directed Search and the Myers-Briggs Type Indicator. Students may receive assistance with resume development, job search skills and interviewing techniques.

The Career Center maintains job postings of full-time, part-time, internship and co-op positions for students who are eligible. These postings may be accessed 24 hours a day through an account with the Career Center. Both on- and off-campus work-study positions for eligible students can be viewed online at www.students.vcu.edu/careers.

The Career Center also offers a comprehensive Cooperative Education Program that blends traditional academics with paid work assignments in industry, business, government and nonprofit organizations. For additional information, including eligibility, go to www.students.vcu.edu/careers and the “Co-op” link.

Graduating students use the Career Center to interview with business, industry, government and education representatives who visit the campus to recruit prospective graduates for permanent positions in their respective organizations. Students are encouraged to sign up as participants in the Career Center’s Web-based resume referral system called RamsRecruiting in order to be referred to employers and have access to job listings.

The University Career Center is located in the Student Commons, Room 143, 907 Floyd Ave., P.O. Box 8432007, Richmond, VA 23284-2007; telephone: (804) 828-1645.

University Counseling Services

Jihad Aziz
Director
www.students.vcu.edu/counseling
University Counseling Services provides psychological services to the university community. The mission of UCS is to create an environment that fosters student growth, development and psychological well-being. Members of UCS' professional staff include clinical psychologists, licensed clinical social workers, a consulting psychiatrist, psychology and social work interns, and advanced graduate students. UCS provides free brief psychotherapy to currently enrolled students as available. UCS adheres to professional, legal and ethical guidelines established by professional organizations and state law to protect student confidentiality.

University Counseling Services include:

- **Counseling and psychotherapy.** Individual and couples work is designed to deal with personal and interpersonal issues.
- **Group counseling.** Ongoing psychotherapy groups focus on personal and social concerns.
- **Psychiatric services.** Limited services include medical evaluation, diagnosis and treatment with psychotropic medication.
- **Crisis services.** Walk-in crisis services during office hours (828-6200) and on-call crisis services after hours and on weekends (828-1234).
- **Consultation and outreach.** Presentations, workshops and staff consultation are available to student organizations, academic departments and other groups on issues relevant to each group's needs.
- **Safe zone.** Workshops for faculty and staff designed to reduce homophobia and heterosexism.

UCS has office locations on both campuses. The Monroe Park Campus office is located in University Student Commons, Room 238, 907 Floyd Ave., P.O. Box 842525, Richmond, VA 23284-2525; telephone: (804) 828-6200. The MCV Campus office is located in the basement of Grant House, 1008 E. Clay St., P.O. Box 980238, Richmond, VA 23298-0238; telephone: (804) 828-3964.

University Student Health Services

Margaret Roberson
Director

[www.students.vcu.edu/health](http://www.students.vcu.edu/health)

University Student Health Services offers quality primary health care for treatment of acute and chronic illness. In addition to diagnosis and treatment, the service emphasizes prevention of illness through screening, counseling and health promotion/public health programs. All full-time undergraduate and graduate students are required to pay the student health fee each semester. Part-time students enrolled in at least three credit hours have the option of paying the health fee. The summer fee is optional for all students who will be enrolled the following fall semester.

USHS professional staff includes physicians, psychiatrists, physician assistants, nurse practitioners, registered nurses, pharmacists, health educators and registered dieticians. Services offered include primary care clinics, allergy clinics (administration of allergy injections ordered and supplied by outside physicians), women's clinics, pharmacy and laboratory services, immunization services, health education/public health programs and an after-hours phone triage service provided for urgent medical advice.

USHS has office locations on both campuses. The Monroe Park Campus office is located in the Sports Medicine Building, 1300 W. Broad St., Suite 2200, P.O. Box 842022, Richmond, VA 23284-2022; telephone: (804) 828-8828; fax: (804) 828-1093. The MCV Campus office is located in the VMI Building, 1000 E. Marshall St., Room 305, P.O. Box 980201, Richmond, VA 23298-0201; telephone: (804) 828-9220.

**Immunization requirements**

- **Health insurance**
- **The Wellness Resource Center**
- **Alcohol and other drug prevention education**
- **Smoking cessation**
- **Nutrition, eating disorders and body image**
- **Sexual assault and domestic violence**
- **Stress management**
- **Sexual health**

**Immunization requirements**

Virginia law requires all full-time students to submit an official certification of immunization to USHS prior to registration. These immunization requirements, along with the necessary forms, can be found at [www.students.vcu.edu/health/immunization.html](http://www.students.vcu.edu/health/immunization.html) and in the Handbook for Admitted Students.

All students regardless of enrollment status, whose birth country is not the U.S. or Canada, are required to complete the tuberculosis screening in the U.S. within the last year. Students enrolled in health career programs may be required to submit additional immunization information and should contact their school for additional requirements.

**Health insurance**

The university is not responsible for accidents occurring to students in connection with class, laboratory, shop, fieldwork, athletics, student activities, travel or any other activity.

The university offers its students an approved insurance plan providing substantial benefits at group rates. The insurance extends for a 12-month period beginning in August, or from the beginning of the second semester to the next August, and includes coverage for accidents, hospitalization, medical, surgical and other benefits for illnesses. Married students may enroll spouses and children. The university strongly recommends that all students enroll in student group health insurance.

Complete information about enrolling is available from USHS and on the Web at [www.students.vcu.edu/health/health_insurance.html](http://www.students.vcu.edu/health/health_insurance.html).

**The Wellness Resource Center**

(804) 828-9355

[www.thewell.vcu.edu](http://www.thewell.vcu.edu)

The Wellness Resource Center (aka “The Well”) is located at 815 S. Cathedral Place and is the prevention education outreach component of Student Health. The Wellness Resource Center is engaged in the science of empowering all students to move toward optimal health — a balance of physical, emotional, social, intellectual and spiritual health. The center’s staff is committed to helping VCU students learn more about health through individual sessions, group presentations and awareness events. Most services are free to VCU students. There are many volunteer opportunities for students at the center, including several peer health educator groups.

**Alcohol and other drug prevention education**

(804) 828-2066

If you are concerned about your use or someone else's use, please feel free to call our office for resource information. Education programming is available upon request. A free online anonymous self-assessment is available at [www.thewell.vcu.edu](http://www.thewell.vcu.edu) (code word is veruams).

**Smoking cessation**

(804) 828-7815

Free Quit Kits, information and individual appointments are available to help students quit tobacco use. Email [quit@vcu.edu](mailto:quit@vcu.edu) for additional information and resources.

**Nutrition, eating disorders and body image**

(804) 828-9355

Education on healthy eating or eating disorder recovery is available through confidential individual nutrition sessions. Programs on nutrition, body image and eating disorders are available to student groups and classes.

**Sexual assault and domestic violence**

(804) 828-2085

Confidential services are available for students with concerns surrounding sexual assault, stalking, sexual harassment and relationship violence. Staff help students identify needs (medical, legal, counseling, academic) and refer to appropriate campus and/or community resources.

**Stress management**

(804) 828-0231

Individual stress management consultations are available. Stress management workshops are available upon request to student groups and classes.
Room fees and housing costs

Cary Street Gym, (804) 827-1100
Thalhimer Tennis Center, (804) 828-1458.
The Outing Rental Center, (804) 828-6004.
MCV Campus Recreation and Aquatic Center, (804) 828-6100.

www.housing.vcu.edu

Flag football, softball, racquet sports, volleyball, soccer, ultimate Frisbee and dodgeball.

Residential Life and Housing

Reuben Rodriguez
Interim Director
www.housing.vcu.edu

VCU's diverse on-campus housing options are designed to meet the needs of any student who chooses to experience residential living. The VCU Residential Life and Housing Office operates a variety of 9- and 12-month living facilities, including traditional residential rooms, suite- and apartment-style buildings, and high-rise residence halls. Approximately 5,000 students choose to live on campus each year.

Residential life at VCU offers many rewards and provides students with the opportunity to gain personal experiences that supplement and complement the formal education gained in classrooms and laboratories. The Residential Life and Housing program offers students the chance to make new friends, meet like-minded academic peers, and develop leadership skills through participation in social, academic, governmental and judicial organizations.

The staff of the VCU Residential Life and Housing Office is dedicated to providing community living situations that support each student’s academic, personal and extracurricular pursuits, and its goal is to offer a sense of belonging for every residential student. Each residence hall is staffed with a coordinator of residence education, a housing manager, at least one resident director, and many in-house resident and community assistants.

New freshman students who submit a housing application by June 1 are guaranteed residential housing. Housing contracts for freshman residence halls are based on the nine-month academic calendar; housing contracts for residence facilities specified for upperclassmen are a combination of 9- and 12-month agreements. Single-semester contracts are available only to new students who enter the university in the spring semester. (See Room fees and housing costs section in “Tuition, fees and expenses.”)

All residence hall rooms are furnished and are wired for Internet, cable and telephone service. For detailed information regarding all VCU residence halls, including features and furnishings, visit the Residential Life and Housing Web site at www.housing.vcu.edu, or contact the Central Housing Office, Gladding Residence Center Room 159, 711 W. Main St., P.O. Box 842517, Richmond, VA 23284-2517; telephone: (804) 828-7666.

Recreational Sports

Tom Diehl
Director
www.recsports.vcu.edu

Recreational Sports provides a variety of programs, services and facilities designed to meet the leisure and health needs of the VCU community. All currently enrolled students with valid identification are eligible to use all facilities. VCU and VCUHS staff, VCU faculty, alumni, retirees and selected contract employees are also eligible to join as members; details and fees are available in the membership section of the Recreational Sports website.

Recreational sports programs

Informal recreation

Available at all facilities and includes drop-in use of the fitness centers, gymnasiums, swimming pools, court space and the Cary Street Field.

Intramural sports

Leagues and tournaments offered throughout the year at various skill levels, as well as men's, women's and corecreational divisions. Sports include basketball, flag football, softball, racquet sports, volleyball, soccer, ultimate Frisbee and dodgeball.

Fitness programs

Programs include free group exercise classes, personal fitness training services, fitness incentive programs and instructional programs.

Outdoor Adventure Program

The OAP provides reasonably priced outdoor recreational trips. Activities such as camping, kayaking, climbing, cross-country skiing and more are offered throughout the year and facilitated by experienced trip leaders. For those planning their own outdoor activities, the Outing Rental Center offers equipment such as canoes, tents, backpacks, sleeping bags and trail guides at nominal cost. For additional information, call (804) 828-6004.

Sport clubs

Clubs give students the opportunity to train and compete against other colleges in a variety of sports. Clubs vary in focus and programming as student members manage the operation of the club and decide on club activities.

Aquatics programs

Programs are held at both Cary Street Gym and MCV Campus Recreation and Aquatic Center. Members can take advantage of learn-to-swim programs for adults and children, water exercise and incentive programs, and aquatic certification programs.

Recreational Sports facilities

Recreational Sports operates five facilities encompassing two fitness centers; two gyms with courts for basketball, volleyball, badminton and table tennis; racquetball and squash courts; three swimming pools; a climbing wall and a bouldering wall; an artificial-turf indoor multipurpose activity center; group exercise studios; cycling studios; martial arts room; lighted, artificial-turf field; a tennis court; and a lighted outdoor basketball court. Both fitness centers offer free weights, selectorized equipment and cardiovascular equipment, as well as televisions that feature Comcast cable. Student organizations may make reservation requests for facility space when available.

Facilities include:

• Cary Street Gym, (804) 827-1100
• Cary Street Field, (804) 827-2526/827-2527
• The Outing Rental Center, (804) 828-6004.
• MCV Campus Recreation and Aquatic Center, (804) 828-6100.
• Thalhimer Tennis Center, (804) 828-1458.

Student media

Greg Weatherford
Student Media Director
www.vcustudentmedia.com

Student Media encourages involvement of students in variety of student publication and broadcasting opportunities including: The Commonwealth Times (independent student press of VCU), Ink (news-features magazine), Poetsense (literary fiction journal), Amendment (literary journal), and WVCW (radio station). All media are student run enterprises.

The Student Media Center is home to these student publications and the radio station. The center is located at 817 W. Broad St., P.O. Box 842010, Richmond, VA 23284-2010; telephone: (804) 828-1058.

Student and university governance

The University Council, an advisory board to the university president, is the highest internal governance body at VCU. The council is made up of 27 faculty members, 10 students, 10 administrators, 10 classified staff members and four subcommittees: the Committee on Student Affairs, the Committee on Academic Affairs, the Committee on Faculty Affairs and the Committee on Classified Staff Affairs.

The Student Governance structure includes the Monroe Park Campus Student Government Association, the MCV Campus Student Government Association, the Programming Commission and the Student Media Commission.
The Monroe Park Campus Student Government Association is an elected body of students from the Monroe Park Campus who are organized into three branches — executive, legislative and judicial — with various committees. Legislative standing committees include academic affairs, appointments, appropriations, elections, human relations, legislative issues and civic action, publicity, and student life. The executive branch has cabinet positions that mirror legislative committees. Nonelected, at-large members are encouraged to join most of these committees. All meetings of the senate are open to the public.

The MCV Campus Student Government Association Executive officers are elected by the organization. Representatives are elected from each class in each of the health science schools on the basis of one representative per 40 students. MCV Campus SGA meetings are held monthly from September through April and are open to all MCV Campus students. The MCV Campus SGA sponsors several social functions including the MCV Campus Winter Ball and study breaks.

Additional information about the Monroe Park Campus and MCV Campus Student Government Associations may be found at www.vcu.edu/sga.

The Programming Commission coordinates programs and events planned by student organizations that specialize in major event planning. Members of the Programming Commission include: Activities Programming Board, Fall Block Step Show Planning Committee, Homecoming Planning Committee, and the InterCultural Festival Planning Committee.

The UCSC administrative office is located in University Student Commons, Room 104, 907 Floyd Ave., P.O. Box 842032, Richmond, VA 23284-2032; telephone: (804) 828-6672.

The Programming Commission coordinates programs and events planned by student organizations that specialize in major event planning. Members of the Programming Commission include: Activities Programming Board, Fall Block Step Show Planning Committee, Homecoming Planning Committee, and the InterCultural Festival Planning Committee.

The Office of Judicial Affairs and Academic Integrity is located in University Student Commons, Suite 106, 907 Floyd Ave., P.O. Box 843071; telephone: (804) 828-1963.

The Office of Judicial Affairs and Academic Integrity supports the educational mission of the university by educating students about appropriate behavior and fostering a community supporting academic success. The office takes the lead in the enforcement of university policies, as outlined in the “Virginia Commonwealth University Rules and Procedures” and the “VCU Honor System,” providing a fair and impartial process for the adjudication of matters of student discipline. The Office of Judicial Affairs and Academic Integrity works in conjunction with university offices to administer the policies for Residence Hall Students and Student Off-campus Conduct, the VCU Alcohol and Drug Policy, the Student Sexual Misconduct Policy, and the Computer and Network Resources Use Policy. Rules and Procedures and the VCU Honor System, are available online at www.provost.vcu.edu/policies.

The Office of Judicial Affairs and Academic Integrity is located in University Student Commons, Suite 106, P.O. Box 843071; telephone: (804) 828-1963.

University policies and procedures
A number of policies and regulations at VCU affect students, and many of these are printed in the general information chapters of this bulletin. Three policy documents are of particular interest to students.

The VCU Rules and Procedures document outlines the rights, responsibilities and privileges of each member of the university community and describes cases when disciplinary action, including separation from the university, may be taken against a member of this community as a result of prohibited behavior as outlined in this document. The VCU Honor System defines academic dishonesty and provides a procedure for judging alleged violators of academic integrity. The Grade Review Procedure outlines the process whereby students may appeal grades that they feel have been assigned unfairly.

Each student is responsible for being familiar with the provisions of all university policies and regulations. The three policy documents described above are printed in full along with the VCU Insider Student Handbook and Resource Guide, which is made available on the Web at www.students.vcu.edu/insider.html.

VCU Honor System
VCU recognizes that honesty, truth and integrity are values central to its mission as an institution of higher learning.

The VCU Honor System describes the responsibilities of students, faculty and administration in upholding academic integrity, while respecting the rights of individuals to the due process offered by administrative hearings and appeals. All people enrolled in any course or program at VCU and all people supervising the learning of any student are responsible for acting in accordance with the provisions of the VCU Honor System.

The honor system gives definitions and illustrative examples of five acts which are violations of the policy, namely: cheating, plagiarism, facilitating academic dishonesty, stealing and lying. There are six penalties for students found guilty of these honor system violations. They are honor probation, assignment of grades, suspension, expulsion, revocation and other relevant sanctions.


Office of Multicultural Student Affairs
Beverly Walker
Director
www.omsa.vcu.edu

The Office of Multicultural Student Affairs is a resource for students, faculty and staff. The primary mission of OMSA is to assist traditionally underserved and/or underrepresented student populations (race, ethnicity, sexual orientation, gender) through advising, support, program development, retention efforts and promoting an appreciation of diversity throughout the campus community.

OMSA service and program components include diversity training, leadership development, referral services, cultural programming, discussion groups, collaboration and partnership development, multicultural resources and scholarship information.

The staff members of OMSA are dedicated to serving as advocates for multicultural students’ concerns and interests while providing advice to a wide array of multicultural groups.

All students are urged to visit the Office of Multicultural Student Affairs located in the University Student Commons, 907 Floyd Ave., Room 215, P.O. Box 843080, Richmond, VA 23284-3080; telephone: (804) 828-6672.

Disability Support Services
Joyce Knight
Coordinator
www.students.vcu.edu/dss

VCU is committed to providing students with disabilities equal opportunities to benefit from all programs, services and activities offered.

Disability Support Services provides:

- Support services including, but not limited to, advocacy, adapted materials, alternative testing, academic and career advising.
- Recommendations for appropriate academic adjustments including exam modifications, classroom accommodations, and auxiliary aids supported by recent documentation.
- Assistance to the VCU community in complying with the provisions of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1974.
- Liaison services between faculty and students with disabilities.
- Technical assistance to university departments.
- Current and accurate information regarding disability-related products, programs and services to current and prospective students, faculty and staff.
- Consultation with secondary schools, special educators, rehabilitation or high school counselors, parents and prospective students concerning university services for students with disabilities.
- A welcoming place for students to meet, share, study, and obtain information concerning disability related issues and opportunities.

Students with disabilities are responsible for self-identification prior to requesting services/accommodations. Students are strongly encouraged to request accommodations at least four weeks prior to the first day of classes; however, students may request accommodations at any time during enrollment at VCU. For additional information visit www.students.vcu.edu/dss.
The Disability Support Services office is located in the Student Commons, Room 102, PO Box 842529, Richmond, VA 23284-2253; telephone/TDD: (804) 828-2253; fax: (804) 828-1944.

Division of Student Affairs courses

Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

Follow this link to cooperative education (COOP) courses
Independent study abroad is for students who wish to study in a field not covered by any of the above study-abroad options. Students may elect to participate in a program offered by another university or organization. VCU Education Abroad will assist students in identifying and applying to the program, maintaining their VCU status while away, and securing financial aid where appropriate. All programs must be approved by VCU.

Except for summer programs offered for VCU credit, all credit received through study abroad will appear on the students' transcripts as transfer credit. Students must earn the equivalent of a "C" or higher for credit to be awarded. Grades are not calculated into the GPA, unless a student is attempting to graduate with honors.

**English Language Program**

**Lisse Hildebrandt**
Interim Director

The English Language Program offers an intensive university-preparation language program for nonnative speakers of English and serves international students, U.S. citizens, permanent residents and refugees.

Core courses are offered at 10 levels of instruction — beginning through advanced — in five eight-week sessions per year. Core courses include: writing and grammar, reading and vocabulary, listening, speaking and pronunciation. Additional elective courses in American language and culture, as well as extracurricular learning opportunities, such as conversation partners and cultural/educational activities, are available to students.

Admission to the ELP may be recommended by the VCU Office of Undergraduate Admissions and International Admissions Office at the time of the application review. Students who want only English-as-a-second-language courses may apply directly to the program.

Placement in the ELP is based on the results of the English Language Placement Examination, a three-hour test in four parts: listening, reading, writing and an oral interview. Students receive their test results by meeting individually with an adviser, who makes recommendations, answers questions and registers students in the appropriate ELP course(s).

**More information**

For more information, students may contact the English Language Program Office at 817 W. Franklin St.; by phone at (804) 828-2551; by fax at (804) 828-2552 or by e-mail at geog@vcu.edu.

**Immigration Services**

**Ingrid A. Mercer**
Director

Imigration Services serves international students and scholars by keeping them informed of all U.S. immigration laws and regulations. This unit provides assistance in obtaining appropriate visas and information and counseling to guide students (F-1), scholars, researchers, visitors (J-1), temporary specialized employees (HIB and TN), and all dependents within the university community so that they can successfully pursue and complete their academic goals.

**International Admissions**

**Blair W. Brown**
Director

VCU encourages qualified international students to seek admission to the university through the International Admissions Office. For complete information and application materials, students should write, fax, e-mail or download the application from the Web and contact International Admissions, Virginia Commonwealth University, 817 W. Franklin St., P.O. Box 843043, Richmond, VA 23284-3043, USA; call (804) 828-6016, e-mail vcuia@vcu.edu or access the Web at www.global.vcu.edu/edtudents/admissions.

Applicants must complete the International Application for Undergraduate Admission form and submit academic records that demonstrate successful completion of secondary school education — usually 12 years of pre-university study in their own country.

As required by U.S. regulations and by VCU admission policies, nonimmigrant applicants must demonstrate satisfactory academic achievement, adequate English proficiency, and the ability to finance all educational and living expenses.

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**Education Abroad**

**Stephanie Davenport**
Director

Founded in the belief that an international and multicultural perspective is invaluable to university students today, VCU Education Abroad encourages students from all majors and fields of interest to include study abroad and international exchange as part of their educational career. The benefits of education abroad are many. Students will learn to understand and function in different cultures, thereby developing a broader understanding of the ways the world works; increase knowledge of and facility in a foreign language; understand differences in educational styles and systems; and increase employment marketability upon graduation.

To accomplish these goals successfully, students are encouraged to study in another cultural setting for a summer, semester or full academic year as part of their degree program. VCU Education Abroad was established to assist students in accomplishing these goals by providing information, advising and by administering study abroad programs. VCU offers the programs listed below to encourage students to participate in overseas and external study.

Participants must be in good standing with the university with two full semesters of consecutive, successful full-time enrollment prior to participation. Please note that individual program requirements may vary.

**Program offerings**

**VCU Summer Study Abroad**

Each year faculty members lead short-term summer study with intensive instruction in an international context. Students may elect courses ranging from an intensive foreign language experience to art, business, and humanities programs. New programs are created every year in countries as diverse as Barbados, Spain, Guatemala, Peru, Italy, Germany, Mexico, France and China.

**International Student Exchange Program**

International Student Exchange Program is a network of 275 colleges and universities in 39 countries and provides exchange opportunities for a summer, semester or academic year. ISEP is well-suited for mature, independent students who wish to be fully immersed into the host culture. Students usually enroll in the chosen host university.

**Independent study abroad**
Applicants can refer to the freshman admission guidelines, transfer admission guidelines and admission procedures in the “Admission to the University” section of this bulletin for specific program requirements.

VCU is unable to provide financial support for international undergraduate students. Therefore, an applicant who needs a student visa must present documented evidence of available financial support to cover living and educational expenses while studying at VCU.

English language proficiency requirements

To ensure maximum benefits from academic study at VCU, all nonnative English-speaking applicants, regardless of immigration status, must provide evidence of English language proficiency before admission and/or before enrollment in the university. English language proficiency is evaluated on factors such as amount and type of formal American education, TOEFL scores and Scholastic Aptitude Test scores.

In general, VCU requires a minimum score of 550 (paper-based), 213 (computer-based) or 80 (Internet based) on TOEFL for admission for undergraduate students. The university reserves the right to require additional testing and study in the VCU English Language Program prior to full-time enrollment in university courses.

Nonimmigrants (students with temporary U.S. visas)

Because of time constraints involved in processing international applications and obtaining visas, prospective international undergraduate applicants should submit all required admission and financial credentials at least three months before they plan to enroll. Applicants who are unable to meet the document submission deadline may not have time to obtain the necessary visa for study at VCU.

Proof of current visa type must be submitted to the International Admissions office before enrollment, unless the applicant is requesting an F-1 or J-1 visa. Students possessing F-1 or J-1 visas admitted to VCU must submit copies of all immigration documents to the VCU International Student Adviser before enrolling in classes.

Immigrants (permanent residents, refugees and asylees)

Since immigrant applicants usually are in the U.S. at the time an application is submitted, these students must meet the same application deadlines as American citizens. Immigrants should submit their applications to the Office of Undergraduate Admissions. If educated in the U.S., immigrant applicants are considered under the same academic policies applicable to U.S. citizens. If educated outside this country, the same academic records are required as those for nonimmigrant applicants.

VCU requires detailed information about U.S. immigration status. Proof of permanent residency or of refugee and asylee status must be submitted with the admission application.

International Student Recruitment

Robert A. Wood
Associate Director

Empowered by presidential initiatives and strong institutional commitment to internationalize Virginia Commonwealth University, the Global Education Office recruitment staff has embarked upon a proven in-depth international student and scholar recruiting effort. The four-year-old recruiting initiative has been successful, resulting in a 67 percent increase in the university’s international student enrollment from 640 students in 2004 to more than 1,100 in the fall of 2006. VCU representatives travel overseas to attend educational fairs, and visit secondary schools and advanced degree institutions to recruit highly qualified undergraduate and graduate students for all disciplines. The quality and scope of majors in VCU’s liberal arts college and 15 schools, as well as the welcoming nature of the international admissions policy, make VCU a strong and attractive choice for American education for many students. GEO international recruiting also engages students via the VCU websites and other electronic and media outlets. Ongoing contacts with school and university counselors and private education admissions are a priority.

Focus for travel has been to the emerging international student markets in the areas of the Middle East and Gulf regions, the Far East and Pacific Rim countries, southern Asia and Latin America. The office also takes advantage of the university’s close proximity to Washington, D.C., to visit and contact embassy educational ministries for access to scholarship students. International recruiting by the Global Education Office plays a vital role in diversifying and enhancing the international community at VCU and in the greater-Richmond area.

International Student and Scholar Services

Pamela O. Haney
Director

Robert A. Wood
Coordinator of Student and Scholar Services and Associate Director of International Recruitment

International students face many challenges when entering a new country. GEO’s International Student and Scholar Services offers assistance and guidance to students as they adjust to a different culture and pursue their educational goals. Student and Scholar coordinators help with pre- and post-arrival concerns, such as airport pick-ups, housing, banking, health insurance and other orientation activities.

Support continues throughout an international student’s stay at VCU. The Student and Scholar Services staff assists, advises and refers students with nonacademic issues, including personal, legal, health and cultural. Academic and immigration matters are referred to appropriate advisers. The coordinators also confer with VCU faculty, staff and university officials regarding student concerns.

A student’s American experience extends beyond the classroom. Student and Scholar Services offers educational, cultural and social activities that promote international understanding and community. The weekly International Student Coffee Hour is a casual gathering where students meet and make friends, practice spoken English and learn about upcoming VCU activities. Students are encouraged to participate in other monthly GEO-sponsored activities, such as camping, skiing, visiting historical sites and tours of Washington, D.C., or New York City.

GEO also recognizes the importance of a support network, particularly when students are far from family and friends. In addition to the International Student Coffee Hour and monthly activities, Student and Scholar Services also provides opportunities for students to develop relationships with those in the VCU and Richmond communities. American volunteers extend the hand of friendship as conversation partners, friendship partners and hosts for holiday visits.

For information or assistance, please contact International Student and Scholar Services, Global Education Office, 817 W. Franklin St., (804) 828-0808, by fax at (804) 828-2552, or by e-mail at rawood@vcu.edu or pohaney@vcu.edu.
Francis L. Macrina, Ph.D.
Vice President for Research

The mission of the Virginia Commonwealth University Office of Research is to create an environment that enables our investigators to: 1) effectively compete for research funding, 2) responsibly conduct research in compliance with mandated policies and 3) broadly disseminate knowledge gained and discoveries made.

Research universities provide the nexus of discovery, education and service. The research process evolves into scholarly publication, enlightening histories, interpretative arts, lifesaving drugs and remarkable innovations ranging from nanotechnology to macroeconomics. Each day VCU researchers make progress toward improving our quality of life and our understanding of the world around us.

Research at VCU provides an incubator for training new scholars and a new generation of students who understand where and how knowledge is formed. No matter their chosen career, all researchers benefit from the curiosity instilled and the recognition that learning is a lifelong process.

The research enterprise at VCU has made substantial forward steps in recent years, doubling the sponsored award base, renovating laboratories, rebuilding the research subjects’ protection program and investing in state-of-the-art animal care equipment and facilities.

The VCU Office of Research seeks to partner with faculty in all schools and departments as they seek funding, plan studies, establish collaborations, calculate budgets, submit grant applications, negotiate industry contracts and secure patents and licensing agreements. Skilled staff within each of the major divisions — sponsored programs administration, research subjects protection, animal research, technology transfer, industry partnerships, and education and oversight — look forward to helping VCU faculty in all realms of the research process.

Affiliated research institutes include the Center for Clinical and Translational Research (and its Research Incubator), the Institute for Drug and Alcohol Studies; the Philips Institute of Oral and Craniofacial Molecular Biology; the Virginia Institute for Psychiatric and Behavioral Genetics; the Institute for Structural Biology and Drug Discovery; and the Institute for Women’s Health.

Research Incubator

The Clinical and Translational Research Incubator is designed to serve as a hub for resources and networking opportunities for established researchers and junior clinical investigators who are working on novel, interdisciplinary and collaborative clinical research at VCU. The RI will support its investigators by coordinating and optimizing current resources and by developing innovative new resources to facilitate the research process. It is anticipated that faculty researchers from the schools of Allied Health Professions, Dentistry, Education, Engineering, Medicine, Nursing, Pharmacy and Social Work, as well as the College of Humanities and Sciences, will access services at the RI.

Center for Clinical and Translational Research

The Center for Clinical and Translational Research at Virginia Commonwealth University provides the necessary longitudinal and cross-disciplinary network, culture and infrastructure for identifying promising discoveries made in the laboratory, testing them in animals and developing trials and studies for humans.

Joint participation of researchers from across the university is critical to this mission. Partnerships with foundations and industry — particularly the support of the Virginia BioTechnology Research Park — is also crucial for moving these discoveries to the clinic. At the same time, mutually beneficial partnerships with community practitioners, community organizations and patients enhance the adoption of evidence-based best practices in general clinical practice and thus deliver improved medical care to the region.

The center offers a corridor in which participants in the translational research continuum can meet, interact and advance each others’ missions. Bench and computer scientists will learn from animal models and clinician observations. Clinical researchers will recognize the need for communication with basic scientists to direct experimental design. Community practitioners will better understand their role in informing the clinical research process and participating in pragmatic clinical trials. Patients will develop a higher comfort level with “medical research.”

The center also serves as the administrative unit for the interdisciplinary graduate degrees in clinical and translational sciences.

John N. Clure, M.D.
Director

The Center for Clinical and Translational Research at Virginia Commonwealth University
Undergraduate Bulletin

da Vinci Center for Innovation
A collaboration of VCU’s School of the Arts, School of Business and School of Engineering, the da Vinci Center for Innovation is a unique collegiate model that advances interdisciplinary innovation and technology-based entrepreneurship. Through academic and other program offerings, the da Vinci Center catalyzes innovation through the unity of arts, business and engineering disciplines as it prepares students to enter a product innovation career and supports learning initiatives by partner organizations.

**da Vinci Center courses**

Descriptions for all courses offered by the university may be accessed through the online courses database at [www.pubapps.vcu.edu/vcucourses](http://www.pubapps.vcu.edu/vcucourses). You may search by unit, subject or keyword, as well as by degree level.

Follow this link to da Vinci Center innovation (INNO) courses.

**Product Innovation, Certificate in (Undergraduate certificate)**

The Certificate in Product Innovation allows undergraduate students in the schools of the Arts, Business and Engineering to develop competency in the area of product innovation.

Employing an interdisciplinary perspective that embodies concepts from each of the three schools, students receive a robust learning experience that leads to an understanding of the challenges associated with and means for managing product design, product development and new-product introduction endeavors.

The Certificate in Product Innovation program runs concurrently with a student’s major and is not a stand-alone program. Students must have a declared major in the School of the Arts, the School of Business or the School of Engineering to participate in the program.

Interested students should first contact and then submit their application to the da Vinci Center for Innovation, which houses the certificate program. Students should apply to the program during or after taking the introductory course, INNO 200 Seminar in Product Innovation.

The certificate requires a minimum of 15 credit hours of approved course work as follows:

- INNO 200 Seminar in Product Innovation
- Two non-discipline electives (Choose the courses offered by the schools outside the major.)
  - ARTF 121 Introduction to Drawing
  - ENGR 121 Engineering Fundamentals
  - MGMT 121 The Business Environment
- Two discipline-specific electives (approved 300- or 400-level courses in the major)*
- INNO 460 da Vinci Project*

* Students may take only one discipline-specific elective course while enrolled in INNO 460.

The director of VCU’s da Vinci Center for Innovation will approve all course work intended to satisfy all elective requirements.

For more information, contact Lisa Crawford, program coordinator for the da Vinci Center for Innovation, at (804) 828-71188 or lfcrawford@vcu.edu.
The Honors College at Virginia Commonwealth University was established to meet the needs of academically talented undergraduate students through a challenging and exciting academic program. The Honors College offers students the opportunity to exchange ideas, ask questions and explore values with fellow honors students and faculty who have been selected carefully for their scholarship and teaching excellence. The Honors College offers opportunities for students to expand their creative and intellectual horizons, and to benefit from small classes in which there is greater interaction between students and faculty, and among students. The center of activities for The Honors College is located at 701 W. Grace St., a living/learning, residential honors community. In this facility, students have meeting rooms, quiet study rooms, computers and recreational areas. The Honors Center is open day and night for study.

Graduation with University Honors

Academic advisers at VCU help students in The Honors College select classes that will fulfill the requirements for graduation and match students’ interests. In addition, honors students are eligible to take courses designated as “honors.” Some classes are specialized courses for The Honors College. Other honors courses are special sections of regular courses open only to honors students. Class size is limited to 20 students to maximize opportunities for interaction with the instructor and fellow students. All honors courses are noted on the student’s official transcript.

To graduate with the distinction of University Honors, entering freshmen must complete the honors core curriculum (18 credit hours) and an additional six credits of elective honors courses, maintain a minimum 3.5 cumulative GPA and present a dossier documenting how he or she has become a well-educated individual. The honors core curriculum comprises six courses: HONR 200, ENGL 295, PHYS 215, PHIL 230, MATH 230 and POLI/INTL 365. Continuing and transfer students entering The Honors College with 12-53 credits (freshmen and sophomores) must complete the following courses: PHYS 215, PHIL 230, MATH 230 and POLI/INTL 365 (honors section) and take 12 additional hours in honors to meet the requirements for graduation with University Honors. Transfer students entering with 54-74 credits from their transfer institution must complete 12 credits in honors course work in order to graduate with University Honors. The dossier will be presented to the dean and the Honors Council in the penultimate semester of the student’s academic work. Details, including deadlines and tips on writing the dossier essay, are available on The Honors College website at www.honors.vcu.edu.

Guidelines and regulations

- Students in The Honors College must maintain at least a 3.5 cumulative GPA and a 3.2 GPA in honors courses.
- Honors students should achieve a standard of excellence in general education as well as in their major field.
- Honors students must enroll in at least two upper-level courses outside their field of specialization or complete a minor.
- The honors student must complete at least 18 credit hours in courses designated as honors courses. Students entering The Honors College in fall 2011 and later must complete at least 24 credits in courses designated as honors courses.

The GPA minimums and the 18 credits (or 24 credits, as applicable) are nonnegotiable. The central objective of The Honors College is that the students demonstrate good scholarship and sound learning in the best of the university’s tradition.

Special opportunities

The Honors College sponsors a variety of intellectual, cultural and social activities as important supplements to classroom study. Among these are:

- The Honors Idea Exchange – an approved student campus organization composed of Honors College students. The Idea Exchange decides each year on its projects and activities. In the past these have included picnics and potluck suppers on the social side, tutoring children and adults and environmental clean-ups on the projects side. The main activity, however, is what the name implies: exchanging ideas.
- The Berglund Seminars – weekly discussions on topics pertinent to the wide-ranging interests of honors students. Discussions are led by outstanding guest speakers from the university faculty and administration, and from many different fields in the community.
- Outstanding Lecturer Series – world-renowned scholars are brought to VCU to lecture on topics of interest and concern to Honors College students. Students have the opportunity to meet informally with the speakers.
- The Honors College is committed to enriching the students’ academic and personal endeavors. Since participants in The Honors College are serious students, special privileges beyond the vast resources available to all VCU students are provided. Some of these privileges include:
  - An honors undergraduate research program
  - Access to the Office of the National Scholarship Coordinator
  - Honors advising
  - Priority registration
  - Special library privileges
  - Honors-only housing

Admission to the Honors College

Eligibility requirements for incoming freshman students

Transfer student admissions

Admission to the Honors College

Eligibility requirements for incoming freshman students

The Honors College is open to qualified entering freshmen, continuing students who demonstrate excellence after enrolling at VCU and transfer students who have shown similar ability at other institutions. High school graduates with combined new SAT scores of at least 1910 (from one test administration) and a 3.5 or higher unweighted high school GPA (on a four-point scale) or are the recipients of a VCU Presidential Scholarship are eligible for admission to The Honors College upon application.

Transfer student admissions

Transfer students with at least a 3.5 cumulative GPA in 12 to 53 semester credit hours of study from their transfer institution must complete an Honors College application and present a personal education essay. The essay describes the student’s perspective on his/her personal education. Specific directions for the paper are found in the admissions information for prospective students on the Honors College’s Web site at www.honors.vcu.edu.

Transfer students who have accumulated more than 53 credits of college course work may petition the dean of The Honors College to gain admission. Petitioning students must be prepared to offer an explanation for the delay of their application to The Honors College and present a plan for completing the requirements for graduation with University Honors. Appeals will be reviewed on a case-by-case basis.
Admission for current VCU students
Continuing students with at least a 3.5 cumulative GPA in 12 to 53 semester credits at VCU must complete an Honors College application and present a personal education essay. The essay describes the student’s perspective on his/her personal education. Specific directions for the paper are on the The Honors College Web site, www.honors.vcu.edu.

Continuing students who have accumulated more than 53 credits of college course work may petition the dean of The Honors College to gain admission. Petitioning students must be prepared to offer an explanation for the delay of their application to The Honors College and present a plan for completing the requirements for graduation with University Honors. Appeals will be reviewed on a case-by-case basis.

Responsibilities
Admission to The Honors College is a privilege that comes with certain responsibilities. In addition to maintaining at least a 3.5 cumulative GPA, honors students are expected to be active members of The Honors College community. To remain active, students must enroll in at least one honors course per academic year and attend at least three honors seminars or other honors events per semester.

To continue in The Honors College, a student must maintain a cumulative GPA of 3.5 or higher. Should a student’s cumulative GPA fall below 3.5, but not below a 3.0, the student may be placed on Honors Probation for one semester.

Honors course approval process
All courses designated as honors must be approved by the Honors College. For more information, contact the Honors College at (804) 828-1803 or visit www.honors.vcu.edu/academics.

Guaranteed Admission Program
The Honors College Guaranteed Admission (GA) Program allows some honors students to gain admission to certain of the university’s professional health sciences or graduate programs. (See the online Graduate or Professional Programs bulletins for specific program information.) Honors students in the GA Program generally may enter the program of their choice without required test scores (except for statistical purposes) and without payment of the application fee, provided they fulfill the requirements for graduating with University Honors and satisfy all of the requirements of the GA Program.

Guaranteed Admission Program application procedures
To be accepted into a Guaranteed Admission Program, a student must be accepted by the university, by The Honors College and by the admissions committee of the program the student wishes to enter. A separate application for guaranteed admission is required. The admissions committee may require an interview. The application (postmark) deadline for the GA Program (medicine) is Nov. 15 of the year prior to the year the student is planning to enroll at VCU. The application (postmark) deadline for the GA Program (all other health sciences) is Jan. 15.

For additional information about The Honors College GA Program, see The Honors College Web site at www.honors.vcu.edu, or write or call Dr. Anne L. Chandler, Senior Associate Dean, The Honors College, Virginia Commonwealth University, P.O. Box 843010, Richmond, VA 23284-3010, (804) 828-1803, achandle@vcu.edu.

Honors College courses
Descriptions for all courses offered by the university may be accessed through the online courses database at www.pubapps.vcu.edu/vcucourses. You may search by unit, subject or keyword, as well as by degree level.

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