2004

Virginia Commonwealth University Graduate and Professional Programs Bulletin

Virginia Commonwealth University

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About this bulletin

All rules set forth in this bulletin will apply until further notice. Virginia Commonwealth University reserves the right to make changes in course of study, fees, rules and regulations governing the conduct of the work in all schools and programs, faculty and staff, and classification of students whenever university authorities deem it expedient or wise to do so.

VCU 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.

VCU is an equal opportunity, affirmative action university providing access to education and employment without regard to age, race, color, national origin, gender, religion, sexual orientation, veteran's status, political affiliation or disability. For further information contact the Office of EEO/AA Services, 901 W. Franklin St., Richmond, VA 23284-3022, (804) 828-1347.
It is my pleasure to welcome you to Virginia Commonwealth University.

With more than $185 million in annual research funding, VCU is ranked by the Carnegie Foundation as one of the nation’s top research universities and is one of only three such universities in Virginia. More than 26,000 undergraduate, graduate, professional and doctoral students pursue 174 degree and certificate programs at the university’s two thriving campuses, located in the heart of Richmond. Forty of the university’s programs are unique in Virginia. Twenty graduate programs have been ranked by U. S. News & World Report as among the best of their kind in the nation, with two ranked number one in their discipline.

As part of a long-range strategic plan, VCU has been enhancing its stature as one of the nation’s leading research universities. Strategic projects have included establishing a new School of Engineering, which has been an important factor in attracting the microelectronics industry to the state, and VCU Life Sciences, a comprehensive undergraduate and graduate program involving the academic and medical faculty.

VCU Life Sciences has spurred a major national public-education initiative through the public television series, "Secrets of the Sequence." In collaboration with Harvard University, the University of California-San Francisco, the University of Michigan, the University of Wisconsin-Madison and the Medical Research Council/Laboratory of Molecular Biology in Cambridge, England, VCU is advising the program’s producers on the latest life sciences discoveries and their ethical implications.

The university also is developing the Virginia BioTechnology Research Park in collaboration with business, civic and government leaders. When it is fully developed, the research park will cover 34 acres in downtown Richmond and employ an estimated 3,000 professional and technical personnel.

The VCU Health System is one of the most comprehensive in the nation. Its physician-faculty, facilities and medical-care programs receive annual recognition from local, regional and national guides and reports on the best health care.

VCU is an extraordinary institution, and we are proud that you are part of the excitement here. Best wishes with your program of study.

Sincerely,
Eugene P. Trani
President

Virginia Commonwealth University
Graduate Programs: Graduate School
Professional Programs: Vice President for Health Sciences
Updated: August 22, 2004
Virginia Commonwealth University is a state-supported institution with an enrollment of more than 26,000 undergraduate, graduate and health professions students studying in 11 schools and one college on its two campuses in Richmond, Va. The MCV Campus is located near the financial, governmental and shopping areas of downtown Richmond; the Monroe Park Campus is two miles west in Richmond’s historic Fan District, a residential area which dates from the 19th century.

The university takes its founding date as 1838, the year that the Medical College of Virginia was created as the medical department of Hampden-Sydney College. MCV became an independent institution in 1854 and state-supported in 1860.

VCU’s Monroe Park Campus was the former Richmond School of Social Work and Public Health, established in 1917. In 1925, it became the Richmond Division of the College of William and Mary; in 1939 its name was changed to the Richmond Professional Institute of the College of William and Mary, from which it separated in 1962 to become an independent state institution. In 1968, MCV and RPI merged to form VCU.

VCU enrolls a diverse student body. The university’s level of funded research ranks it as a Carnegie Doctoral/Research University-Extensive, placing it among the top 100 research universities in the country. The VCU faculty, representing the finest American and international graduate institutions, enhances VCU’s position as among the important institutions of higher learning in the United States via their work in the classroom, laboratory, studio, clinic and as published in scholarly journals. VCU maintains active communications with its growing cadre of alumni and enjoys a cooperative and stimulating relationship with the city of Richmond, which encompasses the arts, the business community, the architectural community and local government.

VCU’s location in historic Richmond affords its students the benefits of living in one of the South’s most cosmopolitan cities. Located in central Virginia, Richmond is a two-hour drive from the Atlantic seashore to the east, Appalachian Mountains recreational sites to the west, and Washington, D.C. to the north. A wide range of cultural, educational and recreational facilities and activities is available in the Richmond area, including a full performance schedule at VCU’s own Performing Arts Center.

Mission of VCU

VCU is a public, urban, research university, supported by the commonwealth of Virginia to serve the people of the commonwealth and the nation. The university provides a fertile and stimulating
environment for learning, teaching, research, creative expression and public service. Essential to the life of the university is a faculty actively engaged in scholarship and creative exploration activities that increase knowledge and understanding of the world, and inspire and enrich teaching.

The university is dedicated to educating full- and part-time students of all ages and diverse backgrounds in an atmosphere of free inquiry and scholarship, so they may realize their full potential as informed, productive citizens with a lifelong commitment to learning and service.

The university serves the local, state, national and international communities through its scholarly activities, its diverse educational programs and its public service activities. As an institution of higher learning in a metropolitan center that also is the capital of the commonwealth, the university enjoys unique resources that enrich its programs and offer special opportunities for contributing its intellectual and creative expertise in the development of innovative approaches to meet the changing needs of our society.

The goals of VCU in carrying out its mission are to:

- provide undergraduate education that includes a broad and rigorous foundation in the arts, sciences and humanities, and explores the ideas and values of humankind,
- offer nationally and internationally recognized professional and graduate programs leading to doctoral, master’s, and other terminal and advanced degrees in the professions, the sciences, the humanities and the arts,
- foster a scholarly climate that inspires creativity, a free and open exchange of ideas, critical thinking, intellectual curiosity, freedom of expression and intellectual integrity,
- expand the boundaries of knowledge and understanding through research, scholarship and creative expression in the sciences, arts, humanities and the professional disciplines,
- value and promote racial and cultural diversity in its student body, faculty, administration and staff to enhance and enrich the university,
- develop and sustain a faculty of the highest quality by providing an environment conducive to their achieving and maintaining national and international stature and by continuing to attract both recognized scholars and outstanding individuals with a high potential for scholarly achievement and excellence in teaching,
- provide an optimal environment for educating and training health care professionals, for conducting research to improve health care and delivery, and for meeting the needs of patients and the community in a comprehensive health care setting,
- use the urban environment as a laboratory for studying and developing new approaches to problems pertaining to the public and private sectors,
- support, through its commitment to public exhibitions, performances and other cultural activities, the imaginative power of the liberal, visual and performing arts to express the problems and aspirations of humanity and to enrich the lives of individuals,
- develop innovative programs for continuing education that establish permanent intellectual connections between the university and its constituents, enhance professional competence and promote dialogue on public issues,
- offer diverse opportunities for individuals to benefit from higher education through a variety of avenues to include flexible scheduling for part-time undergraduate and graduate students, open admission for nondegree-seeking students with appropriate preparation, advanced degree programs for working professionals, selected programs in
diverse locales, admission for graduates with appropriate associate degrees of arts or sciences and support programs for specially admitted students,

- promote interdisciplinary studies within the university to bring new perspectives to bear on complex problems, and
- mobilize its creative energies and its expertise to meet the needs of society and individuals in its unique role as Virginia’s major urban university.

VCU Medical Center Mission

The VCU Medical Center is an integral part of VCU. The five academic schools and teaching hospitals of the MCV Campus serve the needs of the citizens of Virginia for:

- transmission of knowledge related to health services,
- continuity in the supply of health care professionals,
- accessibility to comprehensive and quality health care services,
- development and dissemination of new knowledge for the advancement of the health sciences.

The VCU Medical Center is committed to educational programs directed toward meeting the state’s health needs. Programs are dedicated to maintaining and updating the competency of health professionals as well as preparing graduates to enter the health professions. Educational programs are supported by several academic disciplines, the teaching hospital, carefully selected off-campus health facilities and an institutional commitment to effective teaching.

The VCU Medical Center also is committed to a comprehensive program of patient care: to demonstrate excellence in practice as a model for students, to provide a base of study designed to improve patient care, to meet the needs of patients in its hospital’s service area and to offer highly specialized services in clinical areas of demonstrated expertise.

The VCU Medical Center’s research programs are designed to develop new knowledge in areas ranging from the molecular level through clinical procedures to health care delivery and outcomes. Their goal is to serve as a model for students in the spirit of inquiry and the application of the scientific process to patient care, and to focus interdisciplinary effort on problems amenable to the scientific approach.

Oak Ridge Associated Universities Consortium

Since 1963, students and faculty of VCU have benefited from its membership in Oak Ridge Associated Universities (ORAU). ORAU is a consortium of 87 colleges and universities and a contractor for the U.S. Department of Energy (DOE) located in Oak Ridge, Tenn. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country, to keep its members informed about opportunities for fellowship, scholarship and research appointments and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education, the DOE facility that ORAU operates, undergraduates, graduates, postgraduates as well as faculty enjoy access to a multitude of
opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, geological sciences, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry and mathematics. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase the numbers of underrepresented minority students pursuing degrees in science- and engineering-related disciplines. A comprehensive listing of these programs and other opportunities, their disciplines and details on locations and benefits can be found on the ORISE Web site at http://www.orau.gov/orise.htm or by calling either of the contacts listed below.

ORAU’s Office of Partnership Development seeks opportunities for partnerships and alliances among ORAU’s members, private industry and major federal facilities. Activities include faculty development programs such as the Ralph E. Powe Jr. Faculty Enhancement Awards, the Visiting Industrial Scientist Award and various services to chief research officers.

For more information about ORAU and its programs, contact:

Dr. Marsha Torr, ORAU Councilor for VCU
(804) 828-0732

Ms. Monnie E. Champion, ORAU Corporate Secretary
(865) 576-3306

or visit the ORAU Web site at http://www.orau.org

VCU Health System

In April 1996, Gov. George Allen signed a bill that officially transferred the operations, employees and obligations of the Medical College of Virginia Hospitals to the Medical College of Virginia Hospitals Authority. This transfer occurred on June 30, 1997.

The authority assumes the obligations of MCVH as well as the mission of operating the MCV Hospitals as teaching hospitals for the benefit of the schools of the Health Sciences Division of VCU, and of providing high quality patient care and a site for medical and biomedical research in close affiliation with the Health Sciences Division of VCU.

In winter 2000, the Virginia General Assembly and Gov. James Gilmore authorized the establishment of the Virginia Commonwealth University Health System Authority. This legislation modified the existing MCV Hospitals Authority by integrating the clinical missions of MCV Hospitals, MCV Physicians and the School of Medicine.
Board of Visitors, university administration and academic deans

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.

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.
Determination of student classification for in-state tuition purposes

Section 23-7.4, of the Code of Virginia, governs eligibility for in-state tuition. Effective for students enrolling on or after July 1, 1996, the statute provides:

§ 23-7.4. Eligibility for in-state tuition charges. -

A. For purposes of this section and §§ 23-7.4:1, 23-7.4:2 and 23-7.4:3, the following definitions shall apply:

"Date of the alleged entitlement" means the first official day of class within the term, semester or quarter of the student’s program.

"Dependent student" means one who is listed as a dependent on the federal or state income tax return of his parents or legal guardian or who receives substantial financial support from his spouse, parents or legal guardian. It shall be presumed that a student under the age of twenty-four on the date of the alleged entitlement receives substantial financial support from his parents or legal guardian, and therefore is dependent on his parents or legal guardian, unless the student (i) is a veteran or an active duty member of the U.S. Armed Forces; (ii) is a graduate or professional student; (iii) is married; (iv) is a ward of the court or was a ward of the court until age 18; (v) has no adoptive or legal guardian when both parents are deceased; (vi) has legal dependents other than a spouse; or (vii) is able to present clear and convincing evidence that he is financially self-sufficient.

"Domicile" means the present, fixed home of an individual to which he returns following temporary absences and at which he intends to stay indefinitely. No individual may have more than one domicile at a time. Domicile, once established, shall not be affected by mere transient or temporary physical presence in another jurisdiction.

"Domiciliary intent" means present intent to remain indefinitely.

"Emancipated minor" means a student under the age of eighteen on the date of the alleged entitlement whose parents or guardians have surrendered the right to his care, custody and earnings and who no longer claim him as a dependent for tax purposes.

"Full-time employment" means employment resulting in, at least, an annual earned income reported for tax purposes equivalent to fifty work weeks of forty hours at minimum wage.

"Independent student" means one whose parents have surrendered the right to his care, custody and earnings, do not claim him as a dependent on federal or state income tax returns, and have ceased to provide him substantial financial support.

"Special arrangement contract" means a contract between a Virginia employer or the
authorities controlling a federal installation or agency located in Virginia and a public institution of higher education for reduced rate tuition charges as described § 23-7.4:2 G.

“Substantial financial support” means financial support in an amount which equals or exceeds that required to qualify the individual to be listed as a dependent on federal and state income tax returns.

“Unemancipated minor” means a student under the age of eighteen on the date of the alleged entitlement who is under the legal control of and is financially supported by either of his parents, legal guardian or other person having legal custody.

“Virginia employer” means any employing unit organized under the laws of Virginia or having income from Virginia sources regardless of its organizational structure, or any public or nonprofit organization authorized to operate in Virginia.

B. To become eligible for in-state tuition, an independent student shall establish by clear and convincing evidence that for a period of at least one year immediately prior to the date of the alleged entitlement, he was domiciled in Virginia and had abandoned any previous domicile, if such existed.

To become eligible for in-state tuition, a dependent student or unemancipated minor shall establish by clear and convincing evidence that for a period of at least one year prior to the date of the alleged entitlement, the person through whom he claims eligibility was domiciled in Virginia and had abandoned any previous domicile, if such existed. If the person through whom the dependent student or unemancipated minor established such domicile and eligibility for in-state tuition abandons his Virginia domicile, the dependent student or unemancipated minor shall be entitled to such in-state tuition for one year from the date of such abandonment.

In determining domiciliary intent, all of the following applicable factors shall be considered: continuous residence for at least one year prior to the date of alleged entitlement, state to which income taxes are filed or paid, driver’s license, motor vehicle registration, voter registration, employment, property ownership, sources of financial support, military records, a written offer and acceptance of employment following graduation, and any other social or economic relationships with the Commonwealth and other jurisdictions.

Domiciliary status shall not ordinarily be conferred by the performance of acts which are auxiliary to fulfilling educational objectives or are required or routinely performed by temporary residents of the Commonwealth. Mere physical presence or residence primarily for educational purposes shall not confer domiciliary status. A matriculating student who has entered an institution and is classified as an out-of-state student shall be required to rebut by clear and convincing evidence the presumption that he is in the Commonwealth for the purpose of attending school and not as a bona fide domiciliary.

Those factors presented in support of entitlement to in-state tuition shall have existed for the one-year period prior to the date of the alleged entitlement. However, in determining the domiciliary intent of active duty military personnel residing in the Commonwealth, or the domiciliary intent of their dependent spouse or children who claim domicile through them, who voluntarily elect to establish Virginia as their permanent residence for domiciliary purposes, the requirement of one year shall be waived if all other conditions for establishing domicile are satisfied.

C. A married person may establish domicile in the same manner as an unmarried person. An emancipated minor may establish domicile in the same manner as any other independent student. A nonmilitary student whose parent or spouse is a member of the armed forces may establish domicile in the same manner as any other student.

Any alien holding an immigration visa or classified as a political refugee shall also establish eligibility for in-state tuition in the same manner as any other student. However, absent congressional intent to the contrary, any person holding a student or other temporary visa shall not have the capacity to intend to remain in Virginia indefinitely and,
therefore, shall be ineligible for Virginia domicile and for in-state tuition charges.

The domicile of a dependent student shall be rebuttably presumed to be the domicile of the parent or legal guardian claiming him as an exemption on federal or state income tax returns currently and for the tax year prior to the date of the alleged entitlement or providing him substantial financial support.

For the purposes of this section, the domicile of an unemancipated minor or a dependent student eighteen years of age or older may be either the domicile of the parent with whom he resides, the parent who claims the student as a dependent for federal and Virginia income tax purposes for the tax year prior to the date of the alleged entitlement and is currently so claiming the student, or the parent who provides the student substantial financial support. If there is no surviving parent or the whereabouts of the parents are unknown, then the domicile of an unemancipated minor shall be the domicile of the legal guardian of such unemancipated minor unless there are circumstances indicating that such guardianship was created primarily for the purpose of conferring a Virginia domicile on the unemancipated minor.

D. It is incumbent on the student to apply for change in domiciliary status on becoming eligible for such change. Changes in domiciliary status shall only be granted prospectively from the date such application is received.

A student who knowingly provides erroneous information in an attempt to evade payment of out-of-state fees shall be charged out-of-state tuition fees for each term, semester or quarter attended and may be subject to dismissal from the institution. All disputes related to the veracity of information provided to establish Virginia domicile shall be appealable through the due process procedure required by § 23-7.4:3. (1984, c. 422; 1985, cc. 179, 572; 1988, c. 124; 1989, c. 371; 1990, c. 590; 1991, c. 590; 1996, cc. 931, 981; 1999, c. 439.)

The 1996 amendments. – The 1996 amendments by cc. 931 and 981 are identical, and rewrote this section.

§ 23-7.4:1. Waiver of tuition and required fees for certain students. –

A.

1. All sums appropriated by law for the purpose of effecting the provisions of this subsection shall be used for the sole purpose of providing for free tuition and required fees at the state-supported institutions and institutional charges, general or college fees, or any charges by whatever term referred to, board and room rent, and books and supplies at any education or training institution of collegiate or secondary grade in the Commonwealth of Virginia approved in writing by the Director of the Department of Veterans' Affairs for the use and benefit of the children not under sixteen and not over twenty-five years of age either of whose parents was killed in action, is missing in action or a prisoner of war in any armed conflict subsequent to December 6, 1941, while serving in the Army, Navy, Marine Corps, Air Force or Coast Guard of the United States, or was or is or may hereafter become totally and permanently disabled due to service during such periods if such parent (i) was a citizen of Virginia at the time of entering such service; (ii) is and has been, for at least five years immediately prior to the date on which application was submitted by or on behalf of such child for admission to any education or training institution of collegiate or secondary grade in this Commonwealth, a citizen of Virginia; (iii) is deceased, was a citizen of Virginia on the date of his or her death and had been a citizen of Virginia for at least five years immediately prior to his or her death; or (iv) is deceased and the surviving parent had been, at some time previous to marrying the deceased parent, a citizen of Virginia for at least five years and is and has been a citizen of Virginia for at least five years immediately prior to the date on which application was
submitted by or on behalf of such child for admission to any education or training institution of collegiate or secondary grade in this Commonwealth.

2. Such children, upon recommendation of the Director of the Department of Veterans’ Affairs, shall be admitted to state institutions of secondary or higher education, free of tuition and all required fees. Each state-supported institution shall include in its catalogue or equivalent publication a statement describing the benefits provided by this subsection.

3. The amounts that may be or may become due by reason of attendance at any such educational or training institution, not in excess of the amount specified in subdivision 5, shall be payable on vouchers approved by the Director of the Department of Veterans’ Affairs.

4. The Director of the Department of Veterans’ Affairs shall determine the eligibility of the children who may make application for the benefits provided for in this subsection and shall satisfy himself of the attendance and satisfactory progress of such children at such institution and of the accuracy of the charge or charges submitted on account of the attendance of any such children at any such institution. However, neither the Director nor any employee of the Department of Veterans’ Affairs shall receive any compensation for such services.

5. To carry out the provisions of this subsection, there may be expended such funds as shall be appropriated for the purpose in the general appropriation acts. However, the maximum amount to be expended for each such child shall not be more, when combined with any federal allowance which may be made for such tuition, charges, fees, rent, books and supplies, than the actual amount of the benefits provided for in this subsection.

6. For the purposes of this subsection, user fees, such as room and board charges, shall not be included in this authorization to waive tuition and fees. However, all required fees, educational and auxiliary, shall be waived along with tuition.

B. Any child between the ages of sixteen and twenty-five whose parent or any person whose spouse has been killed in the line of duty while employed or serving as a law-enforcement officer, firefighter, including a special forest warden designated pursuant to §10.1-1135, member of a rescue squad, sworn law-enforcement officer, special agent of the Department of Alcoholic Beverage Control, state correctional, regional or local jail officer, regional jail or jail farm superintendent, sheriff, deputy sheriff, or member of the Virginia National Guard while such member is serving in the Virginia National Guard or as a member of the United States Armed Forces, shall be entitled to free undergraduate tuition and required fees at any public institution of higher education in Virginia under the following conditions:

1. The chief administrative officer of the Alcoholic Beverage Control Board, emergency medical services agency, law-enforcement agency, or other appropriate agency or the Superintendent of State Police certifies that the deceased parent or spouse was employed or serving as a law-enforcement officer or a firefighter, including a special forest warden pursuant to §10.1-1135, or member of a rescue squad or in any other capacity as specified in this section and was killed in the line of duty while serving or living in the Commonwealth; and

2. The child or spouse shall have been offered admission to a public institution of higher education. Any child or spouse who believes he is eligible shall apply to the public institution of higher education to which he has been admitted for the benefits provided by this subsection. The institution shall determine the eligibility of the applicant for these benefits and shall also ascertain that the recipients are in attendance and are making satisfactory progress. The amounts payable for tuition and required fees for the applicants shall be waived by the institution accepting the students.

For the purposes of this subsection, user fees, such as room and board charges,
shall not be included in this authorization to waive tuition and fees. However, all required fees, educational and auxiliary, shall be waived along with tuition.

C. Senior citizens shall be entitled to free tuition and required fees pursuant to the provisions of Chapter 4.5 (§ 23-38.54 et seq.) of Title 23.

D. Tuition and required fees may be waived for a student from a foreign country enrolled in a public institution of higher education through a student exchange program approved by such institution, provided the number of foreign students does not exceed the number of students paying full tuition and required fees to the institution under the provisions of the exchange program for a given three-year period. (1996, cc. 931, 981; 1998, c. 377; 2001, c. 330.)

§ 23-7.4:2. Eligibility for in-state or reduced tuition for students not domiciled in Virginia; tuition grants for members of the National Guard of the Commonwealth of Virginia.

A. A nonmilitary student whose parent or spouse is a member of the armed forces may establish domicile in the same manner as any other student. However, a nonmilitary student, not otherwise eligible for in-state tuition, whose parent or spouse is a member of the military residing in the Commonwealth pursuant to military orders and claiming a state other than Virginia on their State of Legal Residence Certificate, shall be entitled to in-state tuition charges when the following conditions are met: (i) if the student is a child of a member of the armed forces, then the nonmilitary parent shall have, for at least one year immediately prior to the date of alleged entitlement for in-state tuition charges, resided in Virginia, been employed full time and paid individual income taxes to Virginia. Such student shall be eligible for in-state tuition charges only if the nonmilitary parent claims him as a dependent for Virginia and federal income tax purposes, as evidenced by claiming him as a dependent on an individual or joint return; or (ii) if the student is the spouse of a member of the armed forces, then such student shall have, for at least one year immediately prior to the date of alleged entitlement for in-state tuition, resided in Virginia, been employed full time and paid individual income taxes to Virginia; or (iii) if the student is the child or the spouse of a member of the armed forces, then the student shall be entitled to in-state tuition charges for a maximum of one year during the period that the military parent or spouse is residing in the Commonwealth. Any student whose spouse or parent is a member of the armed forces shall be eligible for in-state tuition charges for so long as the conditions of clauses (i) and (ii) of this subsection continue to be met. Military dependents provided in-state tuition for one year during the period the military parent or spouse is residing in Virginia shall be counted as out-of-state students for admissions, enrollment and tuition and fee revenue policy purposes. (Note: § 23-7.4:2 (A)(iii) of the code of Virginia which grants one year in-state tuition to the spouse and children of military personnel has been suspended since the 1994-1996 biennium by § 4-2.01(b)(4) of the appropriation act. Military members are not able to receive any benefit outlined in this section until the suspension period ends.)

B. Students who live outside this Commonwealth and have been employed full time inside Virginia for at least one year immediately prior to the date of the alleged entitlement for in-state tuition shall be eligible for in-state tuition charges if such student has paid Virginia income taxes on all taxable income earned in this Commonwealth for the tax year prior to the date of the alleged entitlement. Students claimed as dependents for federal and Virginia income tax purposes who live outside this Commonwealth shall become eligible for in-state tuition charges if the nonresident parents claiming them as dependents have been employed full time inside Virginia for at least one year immediately prior to the date of the alleged entitlement and paid Virginia income taxes on all taxable income earned in this Commonwealth for the tax year prior to the date of the alleged entitlement. Such students shall continue to be eligible for in-state tuition charges for so long as they or their qualifying parent is employed full time in Virginia, paying Virginia income taxes on all taxable income earned in this Commonwealth and the student is
claimed as a dependent for Virginia and federal income tax purposes.

C. Any person who (i) is a member of the National Guard of the Commonwealth of Virginia and has a minimum remaining obligation of two years, (ii) has satisfactorily completed required initial active duty service, (iii) is satisfactorily performing duty in accordance with regulations of the National Guard, and (iv) is enrolled in any state institution of higher education, any private, accredited and nonprofit institution of higher education in the Commonwealth whose primary purpose is to provide collegiate or graduate education and not to provide religious training or theological education, any course or program offered by any such institution or any public career and technical school shall be eligible for a grant in the amount of the difference between the full cost of tuition and any other educational benefits for which he is eligible as a member of the National Guard. Application for a grant shall be made to the Department of Military Affairs. Grants shall be awarded from funds available for the purpose by such Department.

D. Notwithstanding the provisions of § 23-7.4 or any other provision of the law to the contrary, the governing board of any state institution of higher education or the governing board of the Virginia Community College System may charge the same tuition as is charged to any person domiciled in Virginia pursuant to the provisions of § 23-7.4 to:

1. Any person enrolled in one of the institution’s programs designated by the State Council of Higher Education who is domiciled in and is entitled to reduced tuition charges in the institutions of higher learning in any state which is a party to the Southern Regional Education Compact which has similar reciprocal provisions for persons domiciled in Virginia;

2. Any student from a foreign country who is enrolled in a foreign exchange program approved by the state institution during the same period that an exchange student from the same state institution, who is entitled to in-state tuition pursuant to § 23-7.4, is attending the foreign institution; and

3. Any high school or magnet school student, not otherwise qualified for in-state tuition, who is enrolled in courses specifically designed as part of the high school or magnet school curriculum in a community college for which he may, upon successful completion, receive high school and community college credit pursuant to a dual enrollment agreement between the high school or magnet school and the community college.

E. The governing board of the Virginia Community College System may charge reduced tuition to any person enrolled in one of the System’s institutions who lives within a thirty-mile radius of a Virginia institution, is domiciled in, and is entitled to in-state tuition charges in the institutions of higher learning in any state which is contiguous to Virginia and which has similar reciprocal provisions for persons domiciled in Virginia.

F. The advisory board of the University of Virginia’s College at Wise and the board of visitors of the University of Virginia may charge reduced tuition to any person enrolled at the University of Virginia’s College at Wise who lives within a fifty-mile radius of the University of Virginia’s College at Wise, is domiciled in, and is entitled to in-state tuition charges in the institutions of higher learning in Kentucky, if Kentucky has similar reciprocal provisions for persons domiciled in Virginia.

Any out-of-state students granted in-state tuition pursuant to this subsection and subsection E shall be counted as out-of-state students for the purposes of determining admissions, enrollment, and tuition and fee revenue policies.

G. Public institutions of higher education may enter into special arrangement contracts with Virginia employers or authorities controlling federal installations or agencies located in Virginia. The special arrangement contracts shall be for the purpose of providing reduced rate tuition charges for the employees of the Virginia employers or federal personnel when the employers or federal authorities are assuming the liability for paying, to the extent permitted by federal law, the tuition for the employees or personnel in question.
and the employees or personnel are classified by the requirements of this section as out-of-state.

Special arrangement contracts with Virginia employers or federal installations or agencies may be for group instruction in facilities provided by the employer or federal authority or in the institution’s facilities or on a student-by-student basis for specific employment-related programs.

Special arrangement contracts shall be valid for a period not to exceed two years and shall be reviewed for legal sufficiency by the Office of the Attorney General prior to signing. All rates agreed to by the public institutions shall be at least equal to in-state tuition and shall only be granted by the institution with which the employer or the federal authorities have a valid contract for students for whom the employer or federal authorities are paying the tuition charges.

All special arrangement contracts with authorities controlling federal installations or agencies shall include a specific number of students to be served at reduced rates. Nothing in this subsection shall change the domiciliary status of any student for the purposes of enrollment reporting or calculating the proportions of general funds and tuition and fees contributed to the cost of education. (1996, cc. 931, 981; 1998, cc. 62, 79; 1999, cc. 424, 437; 2000, c. 196; 2001, c. 483.)

§ 23-7.4:3. Determinations of eligibility; appeals and guidelines. –

A. Each public institution of higher education shall establish an appeals process for those students who are aggrieved by decisions regarding eligibility for in-state or reduced tuition charges pursuant to §§ 23-7.4 and 23-7.4:2. The Administrative Process Act (§ 2.2-4000 et seq.) shall not apply to these administrative reviews.

An initial determination shall be made. Each appeals process shall include an intermediate review of the initial determination and a final administrative review. The final administrative decision shall be in writing. A copy of this decision shall be sent to the student. Either the intermediate review or the final administrative review shall be conducted by an appeals committee consisting of an odd number of members. No person who serves at one level of this appeals process shall be eligible to serve at any other level of this review. All such due process procedures shall be in writing and shall include time limitations in order to provide for orderly and timely resolutions of all disputes.

Any party aggrieved by a final administrative decision shall have the right to review in the circuit court for the jurisdiction in which the relevant institution is located. A petition for review of the final administrative decision shall be filed within thirty days of receiving the written decision. In any such action, the institution shall forward the record to the court, whose function shall be only to determine whether the decision reached by the institution could reasonably be said, on the basis of the record, not to be arbitrary, capricious or otherwise contrary to law.

B. To ensure the application of uniform criteria in administering this section and determining eligibility for in-state tuition charges, the State Council of Higher Education shall issue and from time to time revise guidelines, including domiciliary status questions to be incorporated by all state institutions of higher education in their admissions applications. These guidelines shall not be subject to the Administrative Process Act.

An advisory committee, composed of at least ten representatives of institutions of higher education, shall be appointed by the Council each year to cooperate with the Council in developing the guidelines for determining eligibility or revisions thereof. The Council shall consult with the Office of the Attorney General and provide opportunity for public comment prior to issuing any such guidelines. (1996, cc. 931, 981.)

§ 23-7.4:4. Reduction in tuition and fees charged; in-state undergraduates. –
It is the intent of the General Assembly that the Commonwealth of Virginia make available to its citizens an affordable college education. Therefore, notwithstanding any provision of law to the contrary, the governing body of each institution of higher education shall reduce the tuition and mandatory educational and general fees in effect on June 30, 1999, for in-state undergraduate students by twenty percent for the year beginning July 1, 1999, and ending June 30, 2000. Following such reduction, the Governor shall include, in each budget submitted to the General Assembly pursuant to § 2.2-1509, sufficient funds to reimburse each public institution of higher education for such tuition and mandatory fees reduced pursuant to this section. (1999, c. 1042.)

§ 23-7.4:5. Grant for tuition and fees for certain individuals. –

A. The payment of tuition or fees, except fees established for the purpose of paying for course materials, such as laboratory fees, shall be provided for a person who is a bona fide domiciliary of Virginia, as defined in § 23-7.4, and who:

1. Has received a high school diploma or a general educational development (GED) certificate and was in foster care or in the custody of the Department of Social Services or is considered a special needs adoption at the time such diploma or certificate was awarded;

2. Is enrolled or has been accepted for enrollment as a full-time student in a degree or certificate program of at least one academic year in length in a public two-year institution of higher education in the Commonwealth;

3. Has not been enrolled in postsecondary education as a full-time student for more than five years;

4. Maintains the required grade point average established by the State Board for Community Colleges;

5. Has submitted applications for federal student financial aid programs for which he may be eligible; and

6. Meets any additional financial need requirements established by the State Board for Community Colleges for the purposes of such grant.

B. The State Board for Community Colleges, in consultation with the State Council of Higher Education and the Department of Social Services, shall establish regulations governing such grants. The regulations shall include, but shall not be limited to, provisions addressing renewals of grants; financial need; the calculation of grant amounts, after consideration of any additional financial resources or aid the student may hold; the grade point average required to retain such grant; and procedures for the repayment of tuition and fees for failure to meet the requirements imposed by this section. (2000, c. 968.)
Program 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. SACS is located at 1866 Southern Lane, Decatur, GA 30033; telephone: (404) 679-4500.

Academic program accreditation

College of Humanities and Sciences

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

School of Allied Health Professions

Clinical Laboratory Sciences (bachelor’s degree)
National Accrediting Agency for Clinical Laboratory Sciences

Health Administration (master’s and executive master’s degrees)
Accrediting Commission on Education for Health Services Administration

Nuclear Medicine Technology (bachelor’s degree)
Joint Review Committee on Educational Programs in Nuclear Medicine Technology

Nurse Anesthesia (master’s degree)
Council on Accreditation of Nurse Anesthesia Educational Programs

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

Radiation Therapy Technology (bachelor’s degree)
Joint Review Committee on Education in Radiologic Technology

Radiography (bachelor’s degree)
Joint Review Committee on Education in Radiologic Technology

Rehabilitation Counseling (master’s degree)
Council on Rehabilitation Education

School of the Arts

Art Education (bachelor’s and master’s degrees)
National Association of Schools of Art and Design, National Council for Accreditation for Teacher Education, and Virginia Department of Education

Arts (all visual arts degrees)
National Association of Schools of Art and Design

Applied Music (bachelor’s and master’s degrees)
National Association of Schools of Music

Dance/Choreography (bachelor’s degree)
National Association of Schools of Dance

Interior Design (bachelor’s degree)
National Association of Schools of Art and Design/Foundation for Interior Design Education Research

Music Composition (master’s degree)
National Association of Schools of Music

Music Education (bachelor’s and master’s degrees)
National Association of Schools of Music, National Council for Accreditation for Teacher Education and Virginia Department of Education

Music History (master’s degree)
National Association of Schools of Music

Theatre (bachelor’s and master’s degrees)
National Association of Schools of Theatre

Theatre Education (bachelor’s degree)
National Association of Schools of Theatre, National Council for Accreditation for Teacher Education and Virginia Department of Education

School of Business
Business and Accounting (all degrees)
AACSB International – Association to Advance Collegiate Schools of Business

Information Systems (bachelor’s degree)
Accreditation Board for Engineering and Technology (ABET)

School of Dentistry

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, Prosthodontics, and Advanced Education General Dentistry
Commission on Dental Accreditation

School of Education

Education (all degrees)
National Council of Accreditation for Teacher Education and the Virginia Department of Education

Athletic Training (bachelor’s degree)
Commission on Accreditation of Allied Health Education Programs

Recreation and Park Management, Therapeutic Recreation (bachelor’s degree)
Council on Accreditation National Recreation and Park Association/American Association for Leisure and Recreation

School of Engineering

Biomedical Engineering (bachelor’s degree)
Accreditation Board for Engineering and Technology

Chemical Engineering (bachelor’s degree)
Accreditation Board for Engineering and Technology

Electrical Engineering (bachelor’s degree)
Accreditation Board for Engineering and Technology

Mechanical Engineering (bachelor’s degree)
Accreditation Board for Engineering and Technology

Computer Science (bachelor’s degree)
Accreditation Board for Engineering and Technology
School of Medicine

Genetic Counseling (master’s degree)
American Board of Genetic Counseling

Human Genetics (master’s and doctoral degrees)
American Board of Medical Genetics

Medicine (M.D.)
Liaison Committee on Medical Education

Public Health (master’s degree)
Council on Education in Public Health

School of Nursing

Nursing (bachelor’s and master’s degrees)
National League for Nursing (prelicensure programs) – approved by Virginia Board of Nursing

School of Pharmacy

Pharmacy (Pharm.D.)
American Council on Pharmaceutical Education

School of Social Work

Social Work (bachelor’s and master’s degrees)
Commission on Accreditation of the Council on Social Work Education

Specialized program accreditation or certification

School of the Arts

Anderson Gallery
National Association of Schools of Art and Design

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
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 http://www.vcu.edu/enroll/rar/rights.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.

If an eligible student feels that his or her education record is inaccurate, misleading or otherwise in violation of the student’s privacy or other rights, the student may request an amendment to the record.

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.
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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 http://www.consumerinfo.vcu.edu.
Message from the president

Virginia Commonwealth University

Board of Visitors, university administration and academic deans

Determination of student classification for in-state tuition purposes

Program accreditation

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University resources and services

Consumer information

Contact us

Contact us

Virginia Commonwealth University

Graduate School

1001 Grove Ave.
P.O. Box 843051
Richmond, VA 23284-3051
(804) 828-6916
Fax (804) 828-6949
http://www.vcu.edu/graduate
vcu-grad@vcu.edu

Virginia Commonwealth University

Professional Programs

School of Allied Health Professions
http://www.sahp.vcu.edu

School of Dentistry
http://www.dentistry.vcu.edu

School of Medicine
http://www.medschool.vcu.edu

School of Pharmacy
http://www.pharmacy.vcu.edu

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Virginia Commonwealth University
Graduate Programs: Graduate School
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Updated: August 22, 2004
Academic units

Graduate and professional studies

VCU is composed of the following academic units:

Graduate School  
Center for Public Policy  
VCU Life Sciences, including the  
  Center for the Study of Biological Complexity  
  and the Center for Environmental Studies  
College of Humanities and Sciences, including the  
  L. Douglas Wilder School of Government  
  and Public Affairs, the School of Mass Communications, and the School of World Studies  
School of Allied Health Professions  
School of the Arts  
School of Business  
School of Dentistry  
School of Education  
School of Engineering  
School of Medicine  
School of Nursing  
School of Pharmacy  
School of Social Work

Graduate programs are administered by the individual departments, schools and centers with assistance from the Graduate School. Major coordination of the various degree programs is performed by the University Graduate Council chaired by the dean of the Graduate School. The University Graduate Council is comprised of two elected faculty members from each school and one elected faculty member from VCU Life Sciences.

VCU’s professional degree programs are administered by the individual schools offering the programs. Academic requirements are determined by the faculty and administration of the schools in order to satisfy professional licensure requirements.

Graduate and professional programs

For complete information about graduate study at VCU, refer to the Graduate Studies at VCU chapter in this bulletin, as well as the individual school and program sections. For information about professional programs of study, see the Professional Studies at VCU chapter. Refer to the...
admission requirements charts in the reference section of this bulletin for a complete listing of curricula, specializations and tracks, as well as application deadline dates and special admission requirements. Applicants are encouraged to contact the school/department sponsoring the intended program of study at the telephone numbers and/or e-mail addresses listed in the charts. Other important contact information is provided in the directory of this bulletin.

In-depth information about graduate study at VCU is available online at the Graduate School Web site (http://www.vcu.edu/graduate). This site provides links and contact information for all graduate programs offered at VCU. The Web site also provides access the Application to Graduate Study and complete instructions for applying to all graduate programs.
Graduate Studies at VCU

Graduate School

Graduate programs are administered by the individual departments, schools and centers with assistance from the Graduate School. Major coordination of the various degree programs is performed by the University Graduate Council chaired by the dean of the Graduate School. The University Graduate Council is comprised of two elected faculty members from each school and one elected faculty member from VCU Life Sciences.

The Graduate Studies at VCU section of the Graduate and Professional Programs Bulletin documents the official admission and academic rules and regulations that govern graduate education at the university. The University Graduate Council determines these policies. Graduate students and faculty should also check the Bulletin Updates link on the Graduate School Web site for changes to policies and procedures that are approved throughout the academic year.

Graduate programs

In-depth descriptions of all graduate programs at VCU are provided in the individual school and program chapters of this bulletin. The Graduate School Web site (http://www.vcu.edu/graduate) provides links and contact information for all graduate programs offered at VCU. The Web site also provides updates that occur throughout the academic year, as well as the Application to Graduate Study and complete instructions for applying to all graduate programs.

Refer to the Graduate School Web site for a complete listing of all graduate programs, as well as application deadline dates, and special admission requirements and contact information. Applicants are encouraged to contact the school/department sponsoring the intended program of study at the telephone numbers and/or e-mail addresses provided. Other important contact information is provided on the Graduate School Web site as well.
**Off-campus graduate instruction**

VCU is dedicated to serving the needs of Virginians by providing off-campus graduate credit instruction when and where it is needed. Courses are offered in response to an expression of need from various locales and groups.

Off-campus instruction features the same course work available on campus, and most off-campus courses are fully degree-applicable within the admission standards of the Graduate School. Tuition for most off-campus classes is the same as other university classes; however, students in off-campus credit classes are not charged university or activity fees.

For additional information on off-campus credit instruction, contact Edward Howard, coordinator of Off-campus Programs, Office of Community Programs, 920 W. Franklin St., Richmond, VA 23284-3062, telephone (804) 828-8819, or visit the Office of Community Programs Web site at http://www.vcu.edu/ocp.
Admissions

The Board of Visitors, the administration and the faculty of VCU are committed to a policy of equal opportunity in education and employment without regard to age, race, color, national origin, gender, religion, sexual orientation, veteran’s status, political affiliation or disability.

Admission requirements

General admission requirements for graduate study in the university are:

1. graduation from an accredited college or university or its equivalent,
2. except in very unusual cases approved by the graduate dean, a minimum undergraduate GPA of 2.7 on a 4.0 scale for at least the last two years of undergraduate work,
3. satisfactory scores from a current (less than five years old) standardized test commonly used and deemed appropriate by the particular discipline,
4. three letters of recommendation,
5. applicant’s written statement of intent for pursuing graduate studies in a particular discipline, and
6. such additional requirements as may be established by individual programs and schools. These may include personal interviews, auditions, submission of a portfolio or other materials.

An exception to the general admissions requirements is made for students entering through the Guaranteed Admissions Programs of the University Honors Program. (See the heading “Admission through the University Honors Program” in this section.)

Types of admissions

Students may be admitted to graduate studies under one of the following classifications:

Degree-seeking student

An applicant who meets all requirements for admission to a degree program and who has been recommended by the department or school in which the applicant proposes to study may be admitted as a degree-seeking student.

Provisional student

An applicant who is missing an official document or test score may be admitted provisionally to a
degree program, if recommended by the department and approved by the graduate dean. Pending documentation must be provided by the end of the first semester of enrollment. An applicant who has not fully met the requirements of the program or school to which admission is sought also may be admitted to that program or school as a provisional student. Reasons for requesting a provisional admission are evaluated by the department/program and the school, and documents supporting a request of provisional admission are forwarded to the dean of the Graduate School with a request for admission. Conditions of a provisional admission for unmet academic standards must be met within one year of enrollment. No prerequisite courses taken as a provisional student may be applied toward a graduate degree. Failure to meet conditions of provisional admission will result in the student’s dismissal from the Graduate School.

Nondegree-seeking student

An individual who wishes to take graduate courses without formal admission to a degree program is classified as a nondegree-seeking student. There is no limit to the number of credits a nondegree-seeking student may take, as long as the student’s academic performance is credible. In courses where enrollment is limited, first priority is given to students admitted to the program, followed by other VCU graduate degree-seeking students. Nondegree-seeking students are not exempt from any prerequisite that may be specified for a course. A nondegree-seeking student who is later admitted as a degree-seeking student will not be allowed to apply toward a degree more than six credits earned as a nondegree-seeking student.

Application information

Application forms and instructions for applying to all graduate programs are available on the Graduate School Web site at http://www.vcu.edu/graduate/ps/apply_options.html.

A $50 nonrefundable application fee must accompany each application. This fee will not be credited toward tuition payment.

An application cannot be given final consideration until all required credentials have been received. These include the following:

1. two official transcripts or the equivalent from each college or university previously attended,
2. three letters of recommendation, and
3. report of current (less than five years old) scores achieved on the Graduate Record Examination (GRE) or other entrance examinations required by the particular department or school.

These credentials should be considered as minimal. Each graduate and professional section of this bulletin includes detailed information concerning further admission requirements to specific programs and schools. Refer to the Graduate School Web site for a complete listing of graduate programs, as well as application deadline dates, special admission requirements and contact information.

Entrance examinations
To supplement other evidence of preparation for graduate work, most graduate programs at VCU consider in their admissions the scores from current standardized tests commonly used and deemed appropriate for a given discipline. Applicants should refer to the Graduate School Web site for a complete listing of the specific test requirements of all graduate programs. Applicants are encouraged to visit individual department and program Web sites and to contact the school/department sponsoring the intended program of study at the telephone numbers and/or e-mail addresses listed for additional information about specific test score requirements.

Schools or programs reserve the right to accept standardized test scores older than five years at their discretion, as long as official test scores are available from the testing service. Any exceptions to the general requirement proposed by schools or programs must be approved by the University Graduate Council.

Individual exceptions to this requirement may be considered: (a) for students with a previous graduate degree, (b) for students with demonstrated competency (achievement of a grade "B" or above) in course work at the graduate level, preferably in the context of an advanced-degree program and (c) for students entering graduate study through the Guaranteed Admission Programs of the University Honors Program. Any student considered for waiver of standardized testing requirements must meet all other requirements for full admission to the program to which he or she is applying.

Common examinations used at VCU are the Graduate Record Examination (GRE), the Graduate Management Admissions Test (GMAT), the Law School Admissions Test (LSAT), and the Miller Analogies Test (MAT). These examinations will not replace other records of achievement as a basis for admission to the Graduate School, but they will offer additional evidence concerning the qualifications of students wishing to undertake graduate work.

**Admission through the University Honors Program**

VCU students participating in the University Honors Program may apply for guaranteed admission to certain graduate programs before matriculation at VCU or early in their undergraduate studies. (The specific deadline for applying is set by each program.) Honors students who receive guaranteed admission may enter the programs of their choice without submitting additional application material or test scores (in some programs, test scores are required for statistical purposes only) provided they fulfill the requirements for graduation with University Honors and satisfy the curricular prerequisites of the program they plan to enter.

Prior to application for guaranteed admission to a graduate program, the student should meet with the associate director of the Honors Program. Following that meeting, the student must submit a completed graduate application form with three letters of recommendation to the Honors Program, which will then forward it with an endorsement of eligibility to the Graduate School. To be accepted into a Guaranteed Admission Program, a student must be accepted by the university, by the University Honors Program and by the admissions committee of the program the student wishes to enter. The admissions committee may require an interview. Final notification of guaranteed admission is made by the dean of the Graduate School.

For additional information, refer to the Undergraduate Bulletin, or contact the University Honors Program.
Program office at P.O. Box 843010, Richmond, VA 23284-3010; phone (804) 828-1803; or visit online at http://www.vcu.edu/honors.

Programs that offer guaranteed admission through the University Honors Program are:

Doctor of Medicine
Doctor of Physical Therapy
Doctor of Philosophy
  Anatomy
  Biochemistry and Molecular Biophysics
  Biomedical Engineering
  Biostatistics
  Human Genetics
  Microbiology and Immunology
  Pharmacology and Toxicology
  Physiology
  Psychology
Master of Accountancy
Master of Arts
  Economics
  History
Master of Bioinformatics
Master of Business Administration
Master of Education
  Adult Education and Human Resource Development
  Counselor Education
  Early Childhood Special Education
  Emotional Disturbance
  Mental Retardation
  Learning Disabilities
  Severe Disabilities
Master of Environmental Studies
Master of Health Administration
Master of Public Administration
Master of Public Health
Master of Science
  Anatomy
  Biochemistry
  Bioinformatics
  Biomedical Engineering
  Biostatistics
  Business
  Clinical Laboratory Sciences
  Computer Science
  Criminal Justice – Justice Option
  Environmental Studies
  Exercise Science
Genetics Counseling
Gerontology
Human Genetics
Mathematical Sciences
Microbiology and Immunology
Nursing (except Case Management Track)
Occupational Therapy
Pharmacology and Toxicology
Physics
Physiology
Recreation, Parks and Sport Leadership
Rehabilitation Counseling
Master of Science in Nurse Anesthesia
Master of Taxation
Master of Teaching
Master of Urban and Regional Planning

Application procedures

Completed applications and supporting materials must be submitted to the Graduate School. Applications submitted by mail should be addressed to the Graduate School, Virginia Commonwealth University, P.O. Box 843051, Richmond, VA 23284-3051. Applications submitted in person may be delivered to the Graduate School office at Moseley House, 1001 Grove Ave. Completed applications and supporting materials are reviewed by the graduate faculty of the intended program, and final notification of acceptance is made by the dean of the Graduate School. Admission to a graduate program may be contingent upon the successful completion of undergraduate courses, degrees or other prerequisites that may be specified by the program or school. Remedial courses will not apply toward a graduate degree. Applications and supporting materials should be received before the deadlines specified throughout this bulletin. Late applications will be considered when possible but may require provisional admission.

Students who do not apply at least one month prior to the beginning of any semester risk their financial aid eligibility in the event that the admission process is not completed prior to the first day of classes.

Multiple admissions

Students may not be admitted to degree-seeking status in more than one graduate program without petitioning and receiving written permission from the program director or graduate committee of the school(s) in which the student is enrolled and the dean of the Graduate School.

Undergraduate students

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 graduate courses during the last semester of undergraduate study. Their total load should
not exceed 16 hours of combined credit. Credit for any course can be applied only to one degree.

**International students**

The university encourages qualified international students, both nonimmigrant and immigrant, to seek admission to VCU. Complete information and application materials for international students may be obtained on written request from Virginia Commonwealth University, International Admissions, P.O. Box 843043, Richmond, VA, United States 23284-3043; by phone at (804) 828-6016; by e-mail: vcuia@vcu.edu; or online at http://www.vcu.edu/oie/ia/welcome.html.

**English Language Proficiency Requirement**

To ensure maximum benefit from academic study at VCU, all non-native English-speaking applicants, regardless of immigration status, must provide evidence of English language proficiency before admission and/or enrollment in the university.

Evidence of English language proficiency is evaluated based on factors such as length of stay in the United States, amount and type of formal U.S. education, Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores and other standardized test scores such as the GRE or GMAT.

The Graduate School reserves the right to require additional testing and study in the VCU English Language Program prior to full-time enrollment in university courses. The university offers a full-time English-as-a-Second-Language noncredit program. For information on the VCU English Language Program, including fees, contact the English Language Program, Virginia Commonwealth University, P.O. Box 843043, Richmond, VA 23284-3043, United States; (804) 828-2551, or by e-mail: oie-elp@vcu.edu; or online at http://www.vcu.edu/oie/elp.

**Nonimmigrants (students with temporary U.S. visas)**

Due to the time constraints involved in processing applications from international students and in obtaining visas, prospective students should apply well in advance of the international application deadlines. The deadlines are April 1 for fall semester, Oct. 1 for spring semester and Feb. 1 for summer session. Students must meet specific program deadlines. The graduate dean must authorize any exception to application deadlines. All required admission documents must be submitted no later than eight weeks prior to registration if appropriate immigration documents are to be issued. Applicants who are unable to meet this credential deadline will need to defer the intended semester of entry.

Both U.S. government regulations and VCU admission policies require nonimmigrant applicants to demonstrate:

- satisfactory academic achievement,
- adequate English language proficiency, and
- ability to finance all educational and living expenses.

Refer to university and program admission requirements in this bulletin for other information.
requested of all applicants. An applicant must have earned a bachelor's degree from an accredited institution in the United States or an equivalent degree from a recognized foreign institution. Official academic records must be submitted.

International applicants must provide evidence of proficiency in the English language prior to admission and/or full-time enrollment in the university. An applicant may satisfy university English proficiency requirements by obtaining a satisfactory score on the TOEFL. The university minimum TOEFL score requirement is 550 (paper-based) and 213 (computer-based); however, most graduate programs prefer a minimum TOEFL score of 600 (paper-based) and 250 (computer-based). Some graduate programs will accept satisfactory scores on the IELTS as evidence of English proficiency. The university minimum IELTS score requirement is 6.5.

As VCU generally does not provide financial support for graduate international students, applicants needing a student (F-1) visa or a visiting scholar (J-1) visa also must present documented evidence of available financial support to cover annual living and educational expenses while studying at VCU.

Bureau of Citizenship and Immigration Services regulations do not allow nonimmigrant students to study at VCU as special (nondegree-seeking) students. Proof of current visa type must be submitted with the application for applicants who are in the United States on student visas. F-1 students and J-1 visiting scholars admitted to VCU must submit copies of all immigration documents to the international student adviser prior to enrolling in classes.

**Immigrants (permanent residents, resident aliens and asylum applicants)**

Because immigrant applicants usually are in the United States at the time applications are submitted, these students are required to meet the same application deadlines as U.S. citizens.

If educated in the United States, immigrant students will be considered for admission under the same academic policies as those applied to U.S. citizens. If educated outside the United States, the same academic records are required as those for nonimmigrant students.

VCU requires detailed information concerning U.S. immigration status. Proof of permanent residency must be submitted with the admission application.
Graduate Studies at VCU

Financial aid

Current information on financial aid programs, policies and procedures are available on the VCU Web site at http://www.vcu.edu/enroll/finaid. To obtain printed materials or additional information, call or visit the appropriate financial aid office listed.

Monroe Park Campus
Ginter House
Shafer Court Entrance
901 W. Franklin St., P.O. Box 843026
Richmond, VA 23284-3026
(804) 828-6669
Fax: (804) 827-0060
E-mail: faidmail@vcu.edu

Schools of Allied Health Professions, Nursing and Pharmacy
Sanger Hall, Room 1-055
1101 E. Marshall St., P.O. Box 980244
Richmond, VA 23298-0244
(804) 828-9800
Fax: (804) 828-2703

School of Dentistry
Lyons Building, Room 309
520 N. 12th St., P.O. Box 980566
Richmond, VA 23298-0566
(804) 828-9953
Fax: (804) 828-5288

School of Medicine
Sanger Hall, Room 1-008
1101 E. Marshall St., P.O. Box 980565
Richmond, VA 23298-0565
(804) 828-4006
Fax: (804) 827-5555
E-mail: jmcramer@vcu.edu

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 Web site is located at https://iserver.adm.vcu.edu/AIS/STU/S_ESERV_HOME.html.

E-mail – official method of communication

Students are required to obtain an official VCU student e-mail account within one week of the beginning of their first semester of enrollment. Students are responsible for reading in a timely fashion university-related communications sent to their official VCU student e-mail account. The Office of Financial Aid uses e-mail 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 (go to the “Academic” section of “Computer Accounts” at http://www.vcu.edu/it/computer_accounts.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 e-mail may be limited if the financial aid staff member is not confident of the student’s identity.

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 (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 Reasonable Academic Progress (RAP) standards as defined by the VCU Office of Financial Aid (the full VCU RAP policy is available on the Web at http://www.vcu.edu/enroll/finaid),
- 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 the Selective Service registration, if required, and
- 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 (http://studentaid.ed.gov/students/publications/).
Applying for financial aid

The financial aid application process for the academic year begins Jan. 1. All students are encouraged to complete and submit the FAFSA as soon as possible after Jan. 1, designating VCU (school code 003735) to receive the results. In order to reduce problems, errors and omissions on the FAFSA, students are encouraged to apply electronically using FAFSA on the Web (available online at http://www.fafsa.ed.gov). Once the FAFSA is filed, the federal processor will send the student a Student Aid Report (SAR) or electronic SAR Acknowledgement, and also will electronically send the information to the VCU Office of Financial Aid, if VCU was listed as a school to receive the data. If additional information is needed to complete processing of the application, the VCU Office of Financial Aid will send the student a request for additional information. Responding promptly to such requests will ensure timely processing of the application. Once the review of FAFSA data has been completed, the Office of Financial Aid will send the student a Financial Aid Notification.

Please note that health profession students (dentistry, medicine, nursing or pharmacy) must provide both student and parental information on the FAFSA to apply and receive consideration for Title VII grants and loans from the Department of Health and Human Services.

Priority filing dates

The VCU Office of Financial Aid recommends electronically filing the FAFSA by March 1*. Students should complete the FAFSA using data from their completed tax returns. If necessary, they may use estimated tax return data in order to meet the VCU priority filing date but should be prepared to submit a copy of their completed tax returns and W2 forms to VCU as soon as possible. Students will receive their Financial Aid Notification after their FAFSA application data has been verified. If students have not applied for financial aid in a timely manner, they may want to participate in the VCU Installment Payment Plan, which budgets each semester’s bill over four payments. Information about this plan can be found on the Student Accounting Department’s Web site (http://www.vcu.edu/enroll/sa/payment/ipp.html).

* Students who do not have access to the Web may apply using the paper FAFSA, available through VCU, high schools, colleges and most public libraries. Those students completing a paper application should mail it to the federal processor by Feb. 1.

Summer studies

Limited financial aid may be available during the summer semester. Students applying for the summer semester must file the FAFSA by March 1. Students interested in financial aid for the summer semester should obtain a VCU Summer Studies Schedule of Classes (available in March) for more details.

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 financial aid counselor to coordinate aid for their study abroad program. Information about financial aid and study abroad is available online at http://www.vcu.edu/oie/eao/w_intro.html.

**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, the student (and the student’s parents or spouse, if applicable) agreed 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.

**University bill**

The Student Accounting Department sends bills for tuition, fees and other university charges to students whose financial aid will not cover their 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 hold a student from registration for courses.

**Financial aid appeals**

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 unusual circumstances:

- loss or reduction of employment earnings,
- disability or death of parent or spouse,
- separation or divorce,
- loss or reduction of untaxed income,
- losses due to a natural disaster,
- unusually high educational program costs,
- unusual medical expenses and/or
- dependent and child care expenses.

Any financial aid staff member can advise a student about the procedures on how to file an appeal.

**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 student’s 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 tuition/fee bill that was previously paid by financial aid sources.

Examples are available online (go to http://www.vcu.edu/enroll/finaid(links) and click on “Financial aid implications if you withdraw from VCU”).

**Graduate students in undergraduate courses**

Students who are classified as graduate students will be eligible for federal financial aid only if they are enrolled at least half time in courses that can be applied toward their graduate degree. The Office of Financial Aid will identify all graduate students who have applied for financial aid but have registered for less than half-time graduate course work in any given semester. If the undergraduate course work for which the student has registered is considered preparatory to the graduate degree, documentation must be provided by the student’s adviser or program representative to verify which undergraduate courses are required. In these cases, the student will be eligible for federal financial aid, but it will be based on the fifth-year undergraduate loan limits. Students who have been admitted to a dual degree program can take any amount of required undergraduate coursework and will still be eligible for graduate loan limits.

**Reasonable Academic Progress**

To be eligible to receive financial aid at VCU, students must make Reasonable Academic Progress (RAP). RAP is a combination of qualitative and quantitative components. RAP is measured by:

- **GPA.** Generally, graduate students are expected to maintain at least a 3.0 GPA as specified by their departments.

- **Completion rate.** The completion rate is measured by the number of credit hours earned divided by the number of credit hours attempted. All students must successfully complete at least 67 percent of all credit hours attempted (withdrawals, incompletes and repeated courses also are considered attempted credit hours).

The Office of Financial Aid will perform a periodic RAP review for students who receive or apply for financial aid. The reviews are typically performed at the end of the spring semester and must be completed at least once per academic year. Students will be alerted with warning letters, whenever possible, to provide them with notice that their financial aid may be in danger of being suspended. When students fail to meet RAP requirements, they will receive suspension letters 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 RAP.

For more detailed information about the VCU Reasonable Academic Progress policy, visit the Office of Financial Aid Web site (http://www.vcu.edu/enroll/finaid).

**Types of financial aid**

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 federal loan programs provide the most dollars. Federal loans must be repaid after the grace period and/or deferment periods have expired. Students must generally remain enrolled at least half time (five credit hours for graduate students). Multiple repayment plans may be available for most federal loans. Selected loan programs include:

- Federal Direct Loan (subsidized and unsubsidized)
- Health Professions Student Loan
- Loan for Disadvantaged Students
- Nursing Student Loan

**Grants**

Contact individual academic departments for information about grant or scholarship programs.

**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 off-campus locations. Hourly wages will vary depending on skills and experience. Job listings are posted online at http://www.students.vcu.edu/careers. When interviewing for work-study positions, students should take copies of their Financial Aid Notifications to show prospective employers. Graduate students usually work 15 to 25 hours per week.

**Graduate assistantships and fellowships**

University graduate teaching and research assistantships and fellowships are awarded to continuing and newly admitted graduate students. Eligibility is based on a variety of criteria. Special rules, contained in the VCU Graduate School Policies and Procedures Statement on Graduate Fellowships and Assistantships, apply to graduate assistants. Such awards must be coordinated with any other financial aid. Any stipend support is reported to the Internal Revenue Service and is subject to IRS rules. Refer to the Graduate School Web site (http://www.vcu.edu/graduate/es/financing.html) for a copy of the policy statement. A university graduate assistant is precluded from any other type of employment and forgoes the normal student academic
vacations for the period of the appointment. Graduate program directors and prospective graduate assistants should agree upon the specific conditions of employment before finalizing appointments.

Inquiry about such awards should be made directly to the school or department in which the student intends to enroll. Students in the process of applying for admission should indicate their interest in such support. Some programs include a separate application for support with the application for admission. Refer to the individual chapters in this bulletin, program Web sites, and the Graduate School Web site (http://www.vcu.edu/graduate) for additional information on graduate student support and funding opportunities.

**Veteran and reservist educational benefits**

Available veteran and reservist educational assistance programs include:

- Montgomery GI Bill – Active Duty (Chapter 30)
- Vocational Rehabilitation (Voc Rehab, Chapter 31)
- Veterans Education Assistance Program (VEAP, Chapter 32)
- Survivors’ and Dependents Educational Assistance Program (DEA, Chapter 35)
- Montgomery GI Bill – Selected Reserves (Chapter 1606)
- Tutorial Assistance Program
- VA Work-Study Program
- Virginia War Orphans Education Program (WOE)
- Diplomatic Security and Antiterrorism Assistance

Detailed information about eligibility for these programs is available on the Web (http://www.vcu.edu/enroll/finaid). To obtain printed material, contact:

Veterans Affairs Office
Office of Financial Aid
901 W. Franklin St., Room 113
Richmond, VA 23284-3026
(804) 828-6166
Fax (804) 827-0060
E-mail: jmchambe@vcu.edu or faidmail@vcu.edu

Eligible veterans must comply with the following requirements to receive educational benefits as students.

1. The veteran must apply or be accepted into a degree- or certificate-seeking program.
2. The veteran must request certification after registering for courses each semester and each summer session from the Veterans Affairs Office.
3. The veteran may be eligible to use benefits for only those courses applied toward a degree or certificate program.
4. The veteran is not eligible to use benefits for courses taken on an audit basis. If repeating
a course or taking a course with no credits, the veteran must notify the Veterans Affairs Office.

5. The veteran is responsible for ensuring that transcripts are evaluated for transfer credits to be accepted by VCU. The veteran must submit this information to the Veterans Affairs Office for transmittal to the Veteran’s Administration Regional Office.

6. The veteran must notify the Veterans Affairs Office if planning to drop or withdraw from classes or stop attending VCU.

**Virginia War Orphans Education Program**

The Virginia War Orphans Education Program provides educational assistance for children of certain veterans or service personnel. Applications are available at the VCU Veterans Affairs Office. Students should begin the application process at least four months before beginning studies at VCU.

Eligibility for this assistance is contingent upon the following:

1. the applicant must be no less than 16 and no more than 25 years old,
2. one of the applicant’s parents must have served in the U.S. Armed Forces and must be permanently or totally disabled due to war or other armed conflict, or
3. one of the applicant’s parents died as a result of war or other armed conflict, or
4. one of the applicant’s parents is listed as a prisoner of war or missing in action, or
5. the applicant’s parent, on which eligibility is based, has been a resident of Virginia at the time of entry into active military duty, or
6. the applicant’s parent, on which eligibility is based, has been a resident of Virginia for at least 10 consecutive years immediately before date of application, or
7. the surviving parent has been a resident of Virginia for at least 10 years prior to marrying the deceased parent, or must have been a resident of Virginia for at least 10 consecutive years immediately prior to the date on which the application was submitted by or on behalf of such child for admission to any educational or training institution in Virginia.

Those eligible for the Virginia War Orphans Education Program are entitled to a tuition-free education at state-supported educational or training institutions on an annual basis. (Summer school also may be included in the annual certification of students.) Eligible students can use this benefit to pursue any vocational, technical, undergraduate or graduate program of instruction. Generally, programs listed in the academic catalogues of state-supported institutions are acceptable provided they have a clearly defined educational objective, i.e., certificate, diploma or degree.
Graduate tuition and student fees

Students must pay all applicable tuition, room, board and other fees when due, as described in this section. Students who fail to pay these charges on time may be assessed a late payment fee. The university reserves the right to revise or alter all tuition and fees, regulations pertaining to student fees, and collection procedures at any time. In addition to expenses billed by the university, students should make allowances for books, clothing, supplies, travel and other out-of-pocket costs when figuring their total yearly expenses at the university.

Student financial responsibilities

Students who enroll are responsible for:

- full payment of tuition and fees generated from their registration.
- full payment of all room, board and other applicable miscellaneous charges.
- keeping a current permanent mailing address on file with the Office of Records and Registration. Failure to receive an invoice because of an incorrect address does not relieve responsibility for timely payments.
- establishing an official VCU e-mail address and reading their e-mail on a regular basis, since e-mail will be used by faculty and university offices to deliver important communications.

Full-time and part-time graduate study

Graduate students registered for nine to 15 credit hours are considered full time and are charged a flat rate for tuition and fees. Graduate students registered for more than 15 credit hours during any semester will be charged an overload tuition fee on a per-credit-hour basis above the full-time tuition rate. Graduate students registered for fewer than nine credit hours are charged a per-credit-hour rate. Graduate students fully funded as graduate assistants or graduate fellows with tuition remission must register for at least nine credit hours per semester (six credit hours during the summer if funded on a 12-month stipend). Departmental requirements may vary; therefore, students should verify expected course loads with their graduate program directors.

Special 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 by the level of the course unless they enroll for nine or more credits, at which point they are charged at the full-time graduate rate.

Tuition and fee schedule
Tuition and fees are categorized and described on the student accounting Web site at http://www.vcu.edu/enroll/sa/tuition. Questions regarding tuition and fees may be directed to the Student Accounting Department at (804) 828-2228, or by e-mailing stuacctg@vcu.edu. All charges are subject to change by decision of the Board of Visitors.

**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 the same 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. It is determined and assessed by the Student Government Association 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.

**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.

**Off-campus fees**

The university fee, the student activity fee, the student government association fee (except School of Social Work) and the student health fee are not charged to students taking off-campus classes.

**Special fee charges**

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.

**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.

**In-state residency**

Eligibility for in-state tuition benefits is determined by Section 23-7.4 of the Code of Virginia. Refer to the Determination of Student Classification for In-state Tuition Purposes in the Welcome section of this bulletin for the complete code.

All applicants to VCU who want to be classified as Virginia residents must complete the Application for Virginia In-state Tuition Rates included in the graduate application. The residency determination of the applicant will be conveyed at the time of admission.

New students who have been classified initially as non-Virginians for tuition purposes may request a review of the initial residency determination by contacting Records and Registration/Residency, (804) 828-0366. The residency officer may request that the applicant complete a Student Supplemental Application for Virginia In-state Tuition Rates and submit supporting documents for additional clarification. Continuing students who want a change of residency status to in-state tuition rates must submit the supplemental application along with supporting documentation. Requests and applications for a second review must be submitted to the residency officer by the last day of add/drop week for each semester; however, it is strongly recommended that applications be submitted by the appropriate deadline: fall semester, Aug. 1; spring semester, Dec. 1; summer session, May 1.

Students will be notified by mail of decisions regarding residency status. The Office of Financial Aid and the Student Accounting Department also will receive official notification of residency decisions. Any denial for a change in residency status will include procedures for appeal of the intermediate decision. Students who submit fraudulent applications, falsify documentation or conceal information will be subject to reclassification, payment of all nonresident fees owed and university discipline.

**Student billing**

The Student Accounting Department issues bills to students showing charges for the following fees: tuition, student activities fee, student government association fee, technology fee, university fee, private music lessons, school major fees, special course fees, course materials fees, dental kits, disability insurance, room rent, board fees, communication fees, student health fee and study abroad fees.

Tuition and fees for preregistered students, along with charges for room and board where applicable, are due by the beginning of each semester. All other students will be billed after the registration period and should pay upon receipt of the invoice.
Students who have sufficient financial aid to cover their charges will not be sent bills. Students with current charges of $100 or more are eligible to participate in the university’s Installment Payment Plan, offered during the fall and spring semesters. The Installment Payment Plan distributes the cost of tuition, fees, room and board, and communications fee for the semester into four equal installments. The fee per semester is $25, paid with the first installment. An application and information about how to sign up for the payment plan will be included with the bill.

**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, which may create a balance due to the university.

Withdraw results in the academic grade of "W." Charges are assessed and adjusted according to the University Refund Policy. Students may owe a balance to the university.

**Refund of tuition and fees**

The official university tuition and fee policy, applicable for the fall and spring semesters only (excluding short courses), is outlined below. Refunds are calculated on a course-by-course (per-credit-hour) basis, disregarding the full-time cap amounts. Students who are enrolled full-time and withdraw from courses may not receive a refund.

- Students dropping/withdrawing from courses through the first week of class will be entitled to a 100 percent refund of tuition and fees.
- Students withdrawing from courses through the second week of class may be entitled to an 80 percent refund of tuition and the university fee.
- Students withdrawing from courses through the third week of class may be entitled to a 60 percent refund of tuition and the university fee.
- Students withdrawing from courses through the fourth week of class may be entitled to a 40 percent refund of tuition and the university fee.
- Students withdrawing from courses after the fourth week of class are not entitled to receive a refund of tuition and fees.

Students in off-campus courses are subject to the same refund policy as all other university students if the class is scheduled on the regular semester schedule. If the off-campus course is shorter or longer than the academic semester, the refund dates are adjusted accordingly at the request of the Off-campus Programs Office.

The refund policy and deadlines of the English Language Program (ELP) are different from the university’s refund policy for academic courses. Details of the policy may be obtained from the English Language Program Office.

A full refund for Holiday Intersession will be granted if the course is dropped before 4:30 p.m. on the day of the first class meeting. 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 policy also is applicable if the class does not meet on two consecutive days.) Students reducing their academic course loads 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. Partial refunds are not granted for the summer session. This same refund policy also applies to short courses offered during the fall and spring semesters.

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 Federal Financial Aid Refund Policy.

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 Refund Appeals Committee within five years.

Students will not be entitled to a refund of room fees if:

- they are suspended from the residence halls for disciplinary reasons,
- they voluntarily withdraw from the university residence halls but remain registered for any course(s) at the university unless clearance is granted through University Housing and Residence Education, unless they have completed the withdrawal procedures through the Housing Office.

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 Board Contract Terms and Conditions sheet 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, 827 W. Franklin St., Room 104 or 1101 E. Marshall St., Room 1-055.

In accordance with credit card regulations, the university will refund any credit balance that may result on a student’s account as the outcome of a credit card payment back to the credit card account. 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.

**Outstanding charges**

Students who fail to meet payments when due will be assessed late payment penalties and will be denied registration for future classes until they have paid all accrued amounts owed. Students
with balances owed to the university will not be issued degrees, transcripts of grades or graduate reports until all charges are paid in full.

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, Virginia Commonwealth University, P.O. Box 843036, Richmond, VA 23284-3036.

Pursuant to Section 2.2-4805 et seq., of the Code of Virginia, and in accordance with rules and regulations promulgated by the State Comptroller and Attorney General of the commonwealth of Virginia, VCU will charge interest, costs and fees on all accounts past due.

VCU is participating in the Virginia Set-off Debt Collection Act of 1981. Under the provisions of this act, a Virginia individual income tax refund will be subject to the university’s claim for unpaid balances of tuition and fees.

A student who pays a past due balance with a dishonored check may be subject to having his or her current and/or future registration cancelled. A charge is levied for all dishonored checks.

Defense crisis tuition relief, refund and reinstatement guidelines

These guidelines apply to any operation, including a defense crisis, in which the president of the United States declares a sudden mobilization that includes members of the Virginia National Guard or the active or reserve forces of the U.S. Armed Forces who are students enrolled at VCU. Students are offered the following enrollment secession options:

1. Drop all courses before the end of the add/drop period and receive a full refund of all funds paid the university. Students will be asked to sign the drop request form with the registrar indicating that they are not receiving a financial aid 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 meal 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 credits will still be earned for the semester. Students will have 12 months from the date that they leave the university to complete the course work and earn a course grade.

   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 upcoming 12-month period.

3. Accept administrative withdrawal (WM – withdrawal 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/board charges will be made. If a student received financial aid, the amount recovered to the financial aid accounts will follow Title IV guidelines.

   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 90 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.

**Leaving the university**

To initiate this process, the student must provide the university registrar with a copy of his/her active duty orders in addition to a printed copy of his/her course registration for that semester and indicate Option 1, 2 or 3 for each course. The university registrar will 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**

If the student returns within one year of completing their national emergency service requirement, the student may return to the university in the same program of studies without reapplying for admission. The student should begin the re-enrollment process by writing to the director of admissions regarding their intent to re-enroll.
General academic regulations

University rules and procedures

Each member of the VCU community has certain responsibilities, rights and privileges. These are stated in some detail in the VCU Rules and Procedures, and all students are responsible for being familiar with provisions of this document. The rules and procedures are printed in the campus calendar and also are available at the Office of the Dean of Student Affairs. This document also provides for the process whereby disciplinary action, including separation from VCU, may be taken against a member of the university community as a result of behavior that is in violation of the prohibited conduct as stated in the VCU Rules and Procedures.

Graduate students at VCU have a right to appeal actions of an academic nature. If such action involves a course grade, the Grade Review Procedures should be followed. If such action involves computing, the Computer Ethics Policy should be followed. If such action involves dishonesty, the Academic Integrity Policy for Monroe Park Campus students should be followed.

All students enrolled in courses on the MCV Campus are subject to the Honor System of the MCV Campus and, as such, are required to sign an Honor Pledge Card. Copies of the Honor Code and Pledge Cards are available in Office of Records and Registration, Sanger Hall, Room 1-055.

In addition to those standards of conduct described in VCU Rules and Procedures and the MCV Campus Honor Code, which applies to all students enrolled on the MCV Campus, a student enrolled at the university may be dismissed from the school in which enrolled for failure to meet prescribed academic program requirements. Students appealing termination from a graduate program/department should first pursue appeals at the department and/or the school level. After receiving a decision from the department and/or school, a student has the option of filing an appeal with the graduate dean in the process outlined in the Appeal Process for Students Terminated from a VCU Graduate Program.

VCU seeks to foster insight, imagination, creativity, resourcefulness, diligence, honesty and responsibility as well as the education of the men and women enrolled in its graduate programs. Such an enterprise can take place only where the highest standards of academic integrity exist.

Academic dishonesty is the giving, taking or presenting of information or material by students with the intent of unethically or fraudulently aiding themselves or others on any work that is to be considered in the determination of a grade or the completion of academic requirements. Students in doubt regarding any matter related to the standards of academic integrity in a given
course or on a given assignment should consult with the faculty member responsible for the course before presenting the work.

**Effective bulletin**

The bulletin of record for a graduate student is the Graduate and Professional Programs Bulletin in effect at the time of the student’s official admission to the degree program (as specified in the student’s official letter of admission). The effective bulletin contains the official requirements that the student must complete to earn the degree. A student who does not maintain continuous enrollment (as defined in the effective bulletin) must reapply to the program and will be subject to the requirements of the bulletin in effect at the time of readmission. Exception to this policy must be approved by the student’s graduate program director and dean, and the dean of the Graduate School.

**Degree requirements**

The minimum course requirements, rules of admission to degree candidacy, language requirements, thesis or dissertation requirements, comprehensive examinations, transfer of credits, and the like are specified for each program in the graduate programs’ chapters of this bulletin. Many schools, programs and departments print special brochures, student manuals and program guides that may be requested from the appropriate dean or program director.

**Advising program**

Students are responsible for the proper completion of their academic programs. They must be familiar with the Graduate and Professional Programs Bulletin, including general academic regulations promulgated by individual schools and departments. The offices of the deans and department chairs, in cooperation with the advisers and faculty, endeavor to follow each student’s academic progress, and students are encouraged to seek counsel whenever there is a need. If advisers are unable to resolve problems satisfactorily, they will refer students to others as deemed appropriate and necessary. In order to aid advising, students are responsible for maintaining current mailing addresses on file with the Office of Records and Registration, as well as with the schools and departments in which they are enrolled.

**Exceptions**

Exceptions to graduate policies must be approved by the dean of the Graduate School. Appeals for exceptions to graduate school policies are to be made in writing by students to their graduate advisers. The advisers will forward their recommendations, along with copies of the students’ appeals, to the dean of the Graduate School, who represents the University Graduate Council.

**Appeal process, students terminated from a VCU graduate program**

A. Termination process

1. Termination is initiated at program/department level by adviser/graduate program director/department chair via a special action form indicating the reason with relevant documentation attached. Reasons for termination may include but are not
limited to:

- academic ("D" or "F" in class, too many grades of "C," GPA below 3.0, failure of comprehensive exams, unsuccessful defense of thesis/dissertation),
- discontinuous enrollment,
- exceeding time limit,
- honor policy violation,
- academic misconduct or
- professional misconduct.

2. Request for termination is forwarded to the school dean/dean’s designee who reviews the action, signs the form and forwards it to the graduate dean.

3. The graduate dean/dean’s designee reviews the action, signs the form, notifies the Office of Records and Registration and sends a termination letter through certified mail to the student from the graduate dean. This letter must include a statement of the student’s right to appeal and inform the student that appeals must be initiated within 14 days after receipt of this letter.

B. Appeals process

1. All department and/or school appeals processes should be exhausted prior to initiating an appeal to the graduate dean.

2. If the student contacts the Graduate School, the student is instructed to provide the graduate dean with written notification of appeal and reasons. The student assumes the burden of proof in this appeal.

3. The graduate dean provides the graduate program director and school/college dean with copies of the student’s request and asks the graduate program director/dean/department chair to provide the Graduate School with their response, including copies of correspondence and any other supporting documentation that led to the termination. The graduate program director and school dean must respond to the graduate dean’s request for information within 14 days.

4. The graduate dean notifies the student in writing of the decision within 14 days of receiving the information from the graduate program director and the school/college dean.

5. If the appeal is based on a grade appeal, the student may be allowed to register for courses for which the course in question is not a prerequisite, with the understanding that he/she will be dropped retroactively if the termination is upheld.

**Student load**

Student load is the total number of credits for which students are enrolled in any semester. Degree-seeking students may be either full time or part time, dependent upon program rules. Students who are fully funded as VCU graduate assistants with tuition remission are classified as “full time” during any semester in which they enroll for nine or more credits (six during the summer if funded on a 12-month stipend). Departmental requirements vary; therefore, funded students should verify expected course loads with their graduate program directors.

The maximum number of credits for which students may enroll in any semester without special permission is 15. More than 15 credits is an overload. More than 12 credits may result in increased tuition. Permission to enroll for more than 15 credits may be granted upon the written
recommendation of the adviser, through departmental governance procedures, to the dean of the Graduate School.

Each summer course is designed to provide the equivalent of 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 semester calendar. Permission to enroll for more than 15 credits in the summer semester may be granted upon the written recommendation of the adviser through departmental governing procedures to the dean of the Graduate School.

Summer success is predicted on the academic standard of one credit per week. Six credits in five weeks or nine credits in eight weeks are considered a normal load, but VCU does not permit six credits in four weeks or nine credits in six weeks. Suggested scheduling combinations are printed in the Summer Schedule of Classes or are available online at http://www.vcu.edu/schedule.

**Attendance and continuance policies**

Any person engaged in any form of study at VCU that involves use of university facilities, laboratories/studios, and/or libraries, or who is supervised by or consults regularly with a faculty member concerning graduate work on a project, work of art, thesis or dissertation must register formally for a course while engaged in these activities. A graduate student who has completed course requirements for a degree must register at VCU each semester until the degree is awarded. Departments or schools will determine the number of hours for which students must register for each semester as part of their continuous registration policies.

Once admitted to a degree program, a graduate student is expected to enroll each semester. A student admitted to a program or track not requiring a project, work of art, thesis or dissertation must register for at least three semester hours each calendar year.

Instructors are responsible for clearly informing students in writing of the attendance requirement for each course and the consequences of poor attendance. Students must abide by the requirements as announced in each separate class even though the requirements may vary widely among courses.

**Residence for Ph.D. programs**

At many universities, doctoral students are required to maintain at least one to two years of continuous full-time enrollment or “residence.” At VCU, each doctoral program will establish its own residency requirements.

**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 financial aid. Students are advised to consult with a financial aid counselor before making any changes to their enrollment status. See the “Financial Aid” section of this chapter for detailed information.
Cancellation of registration

To cancel registration a student must notify, in writing, the Office of Records and Registration before the end of the “Add-Drop” period, or drop all classes using the Web Registration System. Refunds are issued in accordance with procedures described under the refunds section of this chapter. For readmission guidelines refer to the admissions section.

Leave of absence and withdrawal policies

Leave of absence. Students may request a leave of absence from a program through written appeal to their advisers. The adviser will forward the request, following departmental governance procedures, along with a recommendation to the dean of the Graduate School who will respond for the university. Students who do not register for courses for more than one calendar year and who have not been granted a leave of absence must reapply for admission to VCU and to the graduate degree program.

Withdrawal from the university. To withdraw officially from VCU courses, a student must submit a complete Official Withdrawal Form to the Office of Records and Registration before the end of the eighth week of classes. The Official Withdrawal Form is obtained from the Office of Records and Registration, 827 W. Franklin St., Room 104. Failure to complete this form may result in the assignment of failing grades in all or some of the courses.

The student’s permanent academic record will indicate a grade of withdrawn (“W”) for all courses in which the student was enrolled.

Health-related withdrawals. While graduate students are expected to work toward completion of their degrees without interruption, health-related problems may necessitate withdrawal from the university.

- Some schools require a statement from a physician indicating the nature and severity of the condition, when a student should stop attending classes, and the estimated date of return to school.

- In the event that a student’s health problem poses a danger to the student, to patients or to others with whom the student may come in contact, and the student is unable or refuses to initiate steps to withdraw as stated above, administrative withdrawal of the student may be made by the dean of the Graduate School upon consultation with the appropriate faculty and a qualified physician.

- Because curricular and course content changes may occur and a student’s progress toward a degree may be affected adversely because of an extended absence, specific time periods may be imposed by individual schools with respect to the length of time allowed for absence from school. If there is a delay in return beyond the allotted time period without written consent of the dean of the Graduate School, the student may petition for return with advanced standing.

- Some schools require that prior to return to school, the student must submit to the dean of the Graduate School a statement from a physician. This statement should document that the condition that necessitated the withdrawal has been corrected to a point where the student can complete successfully all curriculum requirements with reasonable accommodation including classroom, laboratory, clinical and fieldwork experience.
Immunization requirements

VCU requires that all full-time students supply validated immunization records to University Student Health Services. This requirement must be completed prior to registering for second semester. Failure to meet these state law requirements will result in a hold placed on the student’s second semester registration. The hold can be removed only upon receipt of the student’s documented records.

The immunization record must be completed fully and accurately and also must be accompanied by documentation that the vaccines were given. This completion may be done in several ways. For example:

1. students may have their physicians transfer the information from their medical records and sign the forms verifying their accuracy, or
2. students may complete the forms using information received from their local health departments or from the armed services, but they then must attach validated copies of supporting documentation.

Many high schools require validated immunization records from students. If students recently have graduated from high school, their immunization records may still be available. They may request that the high school provide them with a copy of their immunization records.

If students cannot provide documented evidence of full immunization according to VCU guidelines, then the students must see their family physicians or health departments and receive updated immunizations. Most city and county health departments offer immunization clinics (Richmond City Health Department, 500 N. 10th St., Room 114).

Immunity to the following diseases must be documented as specified on the forms supplied by the Graduate School with the formal offer of admission.

**Tetanus.** Documentation of (1) is requested. Documentation of (2) is required. (1) Primary immunization series, including month/day/year of each dose, and (2) Tetanus/diphtheria (Td) booster (month/day/year) within the past 10 years.

**Diphtheria.** Documentation of both (1) and (2) is requested. (1) Primary immunization series, including month/day/year of each dose, and (2) Tetanus/ diphtheria (Td) booster, including month/day/year within the past 10 years.

**Polio.** (1) Primary immunization with a total of three doses of OPV (oral Sabin) or (2) primary immunization with a total of four doses of IPV (injected Salk). Note: Documentation of prior vaccination against polio, including month/day/year of each dose, is requested; however, if not completed in the past it is not recommended that the student complete the primary polio series unless the student is less than 18 years old or is planning travel to an area endemic or epidemic for polio.

**Rubeola (measles).** Documentation of one of the following is necessary: (1) Born before 1957 and, therefore, considered immune, (2) two doses of the measles vaccine both administered after 1967 and given after the first birthday at least one month apart (document month/day/
year), (3) physician’s certification of diagnosis of measles including month and year of occurrence, or (4) documentation of immune titer proving immunity. Note: Measles vaccine given before 1968 is not acceptable.

**Mumps.** Documentation of one of the following is necessary: (1) mumps vaccine given after age one, month/day/year documented, (2) copy of report of immune titer, proving immunity, (3) physician’s certification of diagnosis of mumps, including month and year of occurrence or (4) birth prior to 1957 (presumption of immunity).

**Rubella (German measles).** Documentation of one of the following is necessary: (1) Rubella vaccine given after one year of age (document month/day/year) or (2) copy of report of immune titer proving immunity. Note: A history of disease is not acceptable. Rubella vaccine given before June 9, 1969 is not acceptable.

**TB skin test** (ppd) must be performed at University Student Health Service Office once student is attending classes.

**Meningococcal vaccine** is recommended to freshmen students residing in dormitories. The vaccine is available to any student wishing to reduce their risk for the disease.

Students with questions should contact the immunizations staff of University Student Health Service.

Monroe Park Campus  
Suite 159, Gladding Residence Center  
711 W. Main St.  
P.O. Box 842022  
Richmond, VA 23284-2022  
(804) 828-8828  
Fax: (804) 828-1093

**Change of discipline**

Students wishing to change to a graduate discipline outside their present program should obtain new application forms from the Graduate School. Generally, they will have to submit new applications to the new program with all material required of new applicants. The dean of the Graduate School will work with the administrators of the two disciplines to facilitate the admission process for eligible students.

**Transfer credit**

Generally, a maximum of one third of the didactic hours required for a master’s degree or any graduate certificate program may be transferred from another VCU program or outside institution and, if not applied previously toward another degree, may be applied toward a degree. A maximum of 25 percent of course work other than research applied toward all doctoral programs at VCU may be transferred from another VCU program or outside institution if not previously applied toward another degree. Acceptance of transfer credit is made at the school level. (Various schools may have more stringent requirements.)
All transfer work must be at the “A” or “B” grade level from an accredited institution or university. “Credit” or “pass” grades can be accepted only if approved by petitioning the Graduate Advisory Committee or equivalent of the student’s school or college. Students must be in good standing both at VCU and at the institution from which the credits were earned. Some programs will not accept credits earned as a nondegree-seeking graduate student for transfer. VCU will not accept credits which do not apply to a graduate degree at the offering institution for transfer nor will it accept credits from unaccredited institutions for transfer.

**Thesis/dissertation examinations**

The VCU Graduate School Thesis and Dissertation Manual, as developed by the University Graduate Council and VCU Libraries, serves as a guide for the preparation of the graduate theses and dissertations for graduate students in all programs within the university. The manual is available on the Graduate School Web site at [http://www.vcu.edu/graduate/es/thesis.html](http://www.vcu.edu/graduate/es/thesis.html).

General regulations applying to thesis/dissertation committees and competency examinations are as follows.

A graduate advisory committee shall be appointed for each candidate for a master’s degree from whom there is a requirement to produce a thesis or its equivalent in the form of a research project, performance, exhibit or other production. The committee will coordinate and supervise the preparation of the thesis or its equivalent. The committee shall have a minimum of three faculty, one of whom should be from a discipline other than the discipline of the candidate. The chair of the committee will be designated as the candidate’s faculty adviser. Master’s candidates for whom a thesis or its equivalent is not required will have an adviser appointed by the department.

A graduate dissertation committee shall be appointed for each doctoral candidate. The committee will have a minimum of four faculty members, including a chair, who will serve as the candidate’s faculty adviser. At least two members must be from within the candidate’s discipline and at least one from another discipline.

Upon satisfactory completion of all program requirements for admission to candidacy, the doctoral matriculant will take written and/or oral comprehensive examinations administered by the student’s major department or school. Successful completion of the examinations shall entitle the student to advance to doctoral degree candidacy status. The candidate is then allowed to proceed with the research and preparation of the dissertation and any other doctoral degree requirements designated by the department.

In the event of failure, the student may be permitted to retake the comprehensive examination one time only. The re-examination requires the approval of the appropriate graduate program committee.

All research, thesis and dissertation credits taken as part of the final project (thesis/dissertation/project) for awarding a graduate degree are to be graded each semester as “S,” “U” or “F.” An individual department may terminate a student who does not progress satisfactorily as indicated
by a "U" grade in research, thesis/dissertation/project course work. A student who receives a final grade of "F" in the thesis or dissertation will be terminated from the graduate program.

All thesis/dissertation requirements must be completed no later than the Friday preceding the week before Commencement of the semester in which the candidate plans to graduate, including:

- final defense of thesis/dissertation;
- signature sheet with all approval signatures, including the graduate dean's and, if applicable, documentation of IRB or IACUC approval number;
- submission of all required copies to VCU Libraries, with appropriate forms and fees, for binding and copywriting (if applicable), according to instructions in University Graduate Council's Thesis/Dissertation Manual and/or VCU Libraries Electronic Thesis/Dissertation procedures and program/school handbooks; and
- submission of the Survey of Earned Doctorates to the graduate dean (doctoral students only).

Students should contact their graduate program directors regarding internal schedules for submission of copy, defense and approval.

Electronic theses and dissertations

Electronic Theses and Dissertations (ETDs) are digital representations of the traditional work completed by graduate students in partial fulfillment of requirements for graduate degrees. An ETD can be a simple textual document converted to a standard electronic format such as Adobe Portable Document Format (PDF) or a complex combination of images and formats.

Students who complete their dissertation proposal defense or who have approval from their advisers and faculty committees to proceed with their studies will be eligible for inclusion in the ETD pilot program. The purpose of the pilot program is to test the university’s ability to prepare students and faculty to submit theses and dissertations as electronic files on a small scale before recommending that the university consider making this option available to all graduate students.

The objectives of the ETD Project are to offer several advantages over traditional paper-based documents:

1. To empower students to convey a richer message through the use of multimedia and hypermedia technologies.
2. To improve graduate education by allowing students to produce electronic documents, use digital libraries and understand issues in publishing.
3. To increase the availability of student research for scholars and preserve it electronically.
4. To lower the cost of submitting and handling theses and dissertations.
5. To empower universities to unlock their information resources.
6. To advance digital library technology.

Complete information about the ETD Pilot is available online at http://www.vcu.edu/graduate/es/thesis_elec.html.
Satisfactory academic progress

Students must continue to make satisfactory progress toward their degrees. Unsatisfactory grades and unprofessional conduct are areas that may warrant review for possible termination from the program.

Specifically, a student will receive no credit for a course in which a grade of less than a "C" is given.

At the end of each semester, graduate faculty advisers and program directors will review the academic progress of all graduate students in their programs. The academic standing of any graduate student who receives multiple grades of "C" or below or the grade of "U" (Unsatisfactory) on required graduate course work will be reviewed for possible action. A graduate student who receives multiple grades of "C" or below will be reviewed for possible termination from the program. Although the grade of "U" is not included in the calculation of the graduate GPA, graduate students who receive multiple grades of "U" will be considered for possible termination.

Graduation requirements

Candidates for degrees are eligible for graduation upon completion of all academic requirements in effect at the time of the first registration, provided the students are continuously enrolled and provided the requirements are met within the time limit specified by the school or program. Students failing to satisfy the time requirement and who are readmitted to a program shall satisfy requirements in effect at the time of reacceptance into the degree program.

All degrees are conferred by the VCU Board of Visitors upon recommendation of the graduate faculty. Degrees are granted at the close of the semester or summer session in which students complete their work. Degrees will not be granted unless all financial obligations have been resolved with VCU’s accounting office. No degrees will be conferred unless students make formal application for graduation. A student must be enrolled at the time of application (i.e., the semester in which the student graduates).

Graduation applications must be submitted by students to their advisers or deans no later than the dates indicated in the university’s academic calendars on the Web at http://www.vcu.edu/academiccalendars. Students should schedule conferences with their advisers well ahead of the deadline and should note that the application requires the approval of the adviser, the department chair or the school director of graduate studies, and the dean. **Students may not apply the same credits toward two master's degrees.**

Graduate credit hours earned toward a VCU certificate may be applied to degree requirements for master’s or Ph.D. programs. The determination of the acceptability of specific courses to be used for both the certificate and the graduate degree will be the responsibility of that master’s or Ph.D. program or school.

Graduation checklist

The total number of semester credits required for graduation depends upon the major. Specific
information may be found under degree program descriptions. In addition to the specific requirements listed by the department, the following graduation checklist for graduate students, advisers and program directors summarizes all general requirements for graduation as determined by the University Graduate Council.

- Candidate enrolled at time of application/reapplication to graduate (i.e., semester in which candidate plans to graduate).
- Overall graduate GPA is greater than or equal to 3.0.
- Graduate GPA based on all graduate course work attempted after acceptance into program.
- For repeated courses, both original grade and repeat grades included in calculation of graduate GPA.
- No more than six semester hours or 20 percent of total semester hours attempted (whichever greater) at "C" or below level ("C,” “D,” ”F,” “U”).
- No course work approved for transfer below grade of ”B”; no course work approved for transfer included in calculation of GPA.
- At least one half of required course work designated exclusively for graduate students (600 or higher at VCU).
- All Incompletes (I) converted to letter grade by last day of class of semester in which candidate plans to graduate.
- All grades of Continued (CO), Progress (PR) and No Grade (NG) converted to letter grades by last day of class of semester in which candidate plans to graduate.
- All course work taken within prescribed time limits (master’s, five years with two possible one-year extensions; Ph.D., seven years with any extensions approved by Graduate School).
- All requirements for thesis/dissertation (if applicable) completed no later than the Friday preceding the week before Commencement of the semester in which candidate plans to graduate, including
  - signature sheet with all approval signatures, including graduate dean’s and, if applicable, documentation of IRB or IACUC approval number.
  - required copies submitted to VCU Libraries, with appropriate forms and fees, for binding, copywriting (if applicable), etc., according to instructions in University Graduate Council’s Thesis/Dissertation Manual and/or VCU Libraries Electronic Thesis/Dissertation procedures and program/school handbooks. (Candidate should confirm with adviser/program director all internal schedules for submission of copy, defense and approval.)
  - submission of Survey of Earned Doctorates to graduate dean (doctoral students only).
- Student must settle all financial obligations with VCU Student Accounting Department.

**Application to graduate**

At the beginning of each semester, all matriculated graduate students will receive an e-mail reminder from the Office of Records and Registration/Graduation Office to initiate the application to graduate process for the current semester.
The e-mail notification will be sent to the student’s official VCU e-mail address and will include submission deadlines and guidelines. (All graduate students in the School of Medicine are asked to complete a preliminary review before initiating the online E-services graduation checkout procedure and are referred to the School of Medicine guidelines or to their advisers/graduate program directors regarding application to graduate procedures.)

Students planning to graduate in the current semester should proceed.

- First to the E-services Web site to complete the online E-services portion of the graduation checkout procedure https://iserver.adm.vcu.edu/AIS/STU/S_ESERV_HOME.html.

- The Graduation Forms Web site address to complete the Graduate School Application to Graduate according to the instructions provided for the completion and submission of documentation to advisers for review and approval http://www.vcu.edu/enroll/forms/graduation. (These forms are provided in PDF format so that the student 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 a student intends to graduate.

The Graduate School Application to Graduate consists of:

- instructions for students and advisers regarding submission of documentation and the approval process, including a checklist summarizing academic policies and requirements for graduation as determined by the University Graduate Council and articulated in the Graduate Studies at VCU section of the Graduate and Professional Programs Bulletin.

- an approval sheet, requiring both preliminary and final reviews/approvals (and indicating the process by which advisors can notify Records and Registration/Graduation Office if students do not complete their programs of study by the end of the current semester).

- directions for completing Commencement Program/Diploma Information. (This information must be submitted no later than the deadlines provided in the e-mail notification to the student in order to ensure inclusion in the appropriate Commencement Programs.)

- an optional Graduation Worksheet. (Students should check with their advisers/graduate program directors to see if they are required to complete the optional graduation worksheet.)

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 converted, that the record accurately reflects their academic histories and that all degrees have been posted.

Detailed information about the application to graduate process for graduate students and guidelines for graduate program directors/advisors are available on the Graduate School Web site at http://www.vcu.edu/graduate/es/graduation.html.

Reapplying for graduation

Candidates who do not graduate at the end of the semester for which they have applied must reregister and reapply. Students must be enrolled at the time of application/reapplication (i.e., the semester in which the student graduates).
Commencement

Graduate students are encouraged to visit the Graduate School Web site for information about university Graduate School events and activities for May and December commencement ceremonies. Students also are encouraged to visit the VCU Commencement Web site.

Time limit for completion of requirements and eligibility of courses

The time limit for a graduate degree will not extend beyond a period of seven years, which, at the master’s level, includes five years with two possible one-year extensions that may be granted, upon written petition through the adviser or graduate program director, by the dean of the Graduate School.

Course work completed before matriculation and applied toward the degree, including course work at VCU and that transferred from other institutions, will be evaluated by the program/department to determine whether it can be used to fulfill degree requirements. For course work that was taken more than seven years prior to the completion of the VCU degree, the program/department will evaluate the course work for acceptability and report those courses deemed acceptable to the dean of the Graduate School.

Grades

Grade reports

Final grade reports are sent to students at the end of each semester. Grade reports are mailed to the official mailing address on file. Students must submit in writing any change of address to the Office of Records and Registration, P.O. Box 842520, Richmond, VA 23284-2520.

Transcripts

Official transcripts of a student’s academic record will be issued only by the Office of Records and Registration upon written request of the student. Transcripts given directly to students do not carry the university seal and are not official. The seal is attached when the transcript is mailed directly from the university to the receiving party.

Repeated courses

Students receiving grades below “B” shall repeat a course only upon the advice of their program directors. Both the original grade and the repeat grade shall be included in the calculation of the GPA.

Grade review procedure

If a student thinks that a grade is inaccurate, the situation should be discussed with the faculty member. This will allow the faculty member to explain how the final grade was determined and, if an error is detected, to submit a change of grade.

If the student still thinks that the grade was assigned unfairly, a written appeal should be
submitted to the department chair. Upon receipt of the written appeal, the department chair shall provide the student with a copy and explanation of the Grade Review Procedure and shall ensure that the requirements of the Grade Review Procedure are followed.

If the department chair is unable to resolve the complaint, then the dean of the school in which the course was offered will form a grade review committee as described in the Grade Review Procedure policy and will submit its decision to the dean of the school. The decision communicated by the dean of the school in which the program resides is the final decision and will be distributed to the student, faculty member(s) and department chair.

In cases concerning grades awarded for the fall semester, the written appeal must be submitted to the department chair no later than 30 calendar days after the beginning of the following spring semester. In cases concerning grades awarded for the spring semester or summer sessions, the written appeal must be submitted no later than 30 calendar days after the beginning of the following fall semester.

**Grading system**

Work quality is measured by the four-point grade system with the following equivalents:

<table>
<thead>
<tr>
<th>Grade symbol and meaning</th>
<th>Grade-point value per semester credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
</tr>
<tr>
<td>P/F (Pass/Fail)</td>
<td>0.0</td>
</tr>
<tr>
<td>PR (Progress)</td>
<td>0.0</td>
</tr>
<tr>
<td>S/U (Satisfactory/ Unsatisfactory)</td>
<td>0.0</td>
</tr>
</tbody>
</table>

All other grades are temporary, carry no credit and are not used in the computation of a GPA. Refer to the grading explanations below for the use of the grades of “satisfactory” and “unsatisfactory” in relation to thesis/dissertation/research classes.

The number of grade points earned is computed by multiplying the grade-point value for the letter grade by the number of semester credits for the course. As an example, a student receiving an “A” (i.e., four grade points) in a three-credit course receives 12 grade points.

The grades of accepted transfer courses are not included in the computation of the VCU GPA. Graduate students are not designated as special honors graduates (i.e., cum laude, magna cum laude, summa cum laude) on transcripts or diplomas upon completion of their programs. No graduate student shall be awarded degree credit for remedial work. Students advised to take any level course for remedial work should be notified in writing that the course credit shall not apply to the degree they are pursuing. Other bodies may rule later, should the student wish to apply the credit to some other degree.
Grade of audit (AU)

Class size permitting, students may register for courses on an audit basis. A student may register for audit only during add/drop and late registration periods as a new registration and not as a change from credit to audit. 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 eight-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 in terms of classification as a full-time student. Courses taken for audit, however, do not satisfy minimum enrollment requirements for students receiving graduate teaching or research assistantships, graduate fellowships, or university graduate scholarships.

Grade of continued (CO)

The grade of “CO” may be assigned as an interim grade for those courses that run over several grade reporting periods. The “CO” indicates that the course is not expected to be completed in a single semester and that students must reregister for the course. Upon completion of the course, a final grade will be assigned to the current semester, and the previous “CO” grade(s) will remain. This grade may be assigned only in courses approved for such grading.

Grade of incomplete (I)

If because of circumstances beyond their control, students are unable to meet all the requirements of a course by the end of a semester, the mark of incomplete (“I”) may be given. The awarding of a mark of “I” requires an understanding between instructor and student as to when and how the course will be completed. This understanding must be recorded on an Incomplete Grade Assignment Form that is submitted instead of a final course grade. The maximum time limit for submission of all course work necessary for removal of an incomplete is the end of the last day of classes of the next semester following the semester in which the incomplete was incurred (i.e., an incomplete awarded in the fall semester must be converted by the last day of classes in the spring semester, and an incomplete awarded in the spring or summer session must be converted by the last day of classes in the fall semester). At that time, an unremoved grade of incomplete is changed automatically to a failing grade. Individual departments and schools may have more stringent time limits. An extension of the time limit is possible, but must be approved, prior to the expiration date stated above, by the instructor and the dean of the school through which the course is offered. Written approval indicating the new time limit must be filed with the dean of the Graduate School.

Grade of pass (P)

This grade is awarded for certain courses to denote satisfactory completion of requirements. Courses assigned the grade of “P” will not be computed in the GPA.

Grade of progress (PR)
The mark of “PR” may be assigned only in courses approved for such grading. Unlike the mark of “I,” “PR” will not automatically be changed to a failing grade at the end of the succeeding semester.

Grades of satisfactory (S), unsatisfactory (U) or fail (F) in research, thesis and dissertation courses

All research, thesis and dissertation credits taken as part of the final project (thesis/dissertation/project) for awarding a graduate degree are to be graded each semester as “S,” “U” or “F.” There is no limit to the number of these credits a student may take while pursuing completion of the degree as long as the student receives a grade of “S” for each credit. An individual department may terminate a student who does not progress satisfactorily as indicated by a “U” grade in research, thesis/dissertation/project course work. A student who receives a final grade of “F” in the thesis or dissertation will be terminated from the graduate program.

Grade of withdrawal (W)

The grade of “W” indicates that the student has officially withdrawn from a course or has been dropped for nonattendance. No student who has officially withdrawn from a course or who has been dropped for nonattendance may attend subsequent meetings of the course.

Course listings

Identification of symbols

I  A course offered in the first semester
II A course offered in the second semester
I, II A course offered in each semester
I and II A course continued through two semesters
S  A course offered in summer sessions

Course interpretation

A single number listing for a course, such as MGMT 648, indicates that 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 THEA 603, 604 and designated as semester courses, consist of two one-semester courses, either semester of which may be taken without the other.

Courses listed with a double number, such as APPM 575-576, are designated as continuous courses and 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. The university reserves the right to withdraw any course or program.
Course numbering

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 offered for students to make up deficiencies in previous training or to improve certain basic skills.

1XX and 2XX undergraduate, lower level

Courses with these numbers are 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, graduate students will be advised by their graduate advisers to enroll in prerequisite 4XX courses. Graduate programs can require that 400-level courses be taken, but credit hours in these courses cannot count toward the graduate degree or in the graduate GPA (effective fall 2004).

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 professional graduate courses

First year, first professional (medicine, dentistry, pharmacy and physical therapy) courses normally open to students enrolled in the M.D., D.D.S., Pharm.D. and D.P.T. 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 (medicine, dentistry, pharmacy and physical therapy [second...
and third year]) courses normally open only to students enrolled in the M.D., D.D.S., Pharm.D. and D.P.T. 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 (medicine, dentistry and pharmacy) courses normally open only to students enrolled in the M.D., D.D.S. and Pharm.D. programs. Certain courses of this group may be designated by the department and approved by the Graduate Council for graduate credit.
Professional Studies at VCU

Virginia Commonwealth University currently offers first professional degree programs leading to the Doctor of Dental Surgery, Doctor of Medicine, Doctor of Pharmacy and Doctor of Physical Therapy degrees.

Professional programs admissions

For information about admission to MCV Campus professional programs, refer to professional sections of the schools of Allied Health Professions, Dentistry, Medicine and Pharmacy.

General admission requirements and procedures

The Board of Visitors, the administration and the faculty of VCU are committed to a policy of equal opportunity in education and employment without regard to age, race, color, national origin, gender, religion, sexual orientation, veteran’s status, political affiliation or disability.

Admission requirements

Admission requirements, entrance examinations and application materials for first professional programs may be obtained by contacting the appropriate admissions office. Other detailed information including financial aid opportunities, procedures for international students, regulations and procedures, academic, curricula, and degree requirements are included in the section describing each professional program.

Admission through the University Honors Program

VCU undergraduate students participating in the University Honors Program may apply for guaranteed admission to certain professional programs before matriculation at VCU or early in their undergraduate studies. (The specific deadline for applying is set by each program.) Honors students who...
receive guaranteed admission may enter the programs of their choice provided they fulfill the requirements for graduation with University Honors and satisfy the curricular prerequisites of the program they plan to enter. In some programs, the requirement for standardized testing is waived.

To be granted guaranteed admission to any professional program, a student must submit a completed application form with three letters of recommendation to the appropriate admissions office as indicated previously. To be accepted into a Guaranteed Admission Program, a student must be accepted by the university, by the University Honors Program and by the admissions committee of the program the student wishes to enter. The admissions committee may require an interview. Final notification of guaranteed admission is made by the appropriate school’s admissions office. For additional information, refer to the Undergraduate Bulletin.

The following professional programs offer guaranteed admission through the University Honors Program:

- Doctor of Dental Surgery
- Doctor of Medicine
- Doctor of Pharmacy
- Doctor of Physical Therapy

**International students**

International students should refer to the appropriate professional program’s chapter for information regarding international student admission guidelines.

**Doctor of Physical Therapy (D.P.T.)**

School of Allied Health Professions
Cecil B. Drain
Dean

Physical Therapy Admissions
Annabel M. Edge
Admissions Coordinator

1200 E. Broad St., Room B-216
P.O. Box 980224
Richmond, VA 23298
(804) 828-0234

**General information**

Financial aid
Tuition, fees and student financial responsibilities
General academic regulations
VCU Life Sciences
Dietetic internship
Financial aid

Current information on financial aid programs, policies and procedures are available on the VCU Web site at http://www.vcu.edu/enroll/finaid.

To obtain printed materials or additional information, call or visit the appropriate financial aid office.

Schools of Allied Health Professions, Nursing and Pharmacy
Sanger Hall, Room 1-055
1101 E. Marshall St.
P.O. Box 980244
Richmond, VA 23298-0244
(804) 828-9800
Fax (804) 828-2703

School of Dentistry
Lyons Building, Room 309
520 N. 12th St.
P.O. Box 980566
Richmond, VA 23298-0566
(804) 828-9953
Fax (804) 828-5288

School of Medicine
Sanger Hall, Room 1-008
1101 E. Marshall St.
P.O. Box 980565
Richmond, VA 23298-0565
(804) 828-4006
Fax (804) 827-5555
E-mail: jmcramer@vcu.edu

eServices – online records access

Students are encouraged to use the eServices Web site, 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 Web site is located at https://iserver.adm.vcu.edu/students.
E-mail – official method of communication

Students are required to obtain an official VCU student e-mail account within one week of the beginning of their first semester of enrollment. Students are responsible for reading in a timely fashion university-related communications sent to their official VCU student e-mail account. The Office of Financial Aid uses e-mail 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 (go to the “Academic” section of “Computer Accounts” at http://www.vcu.edu/it/computer_accounts.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 e-mail may be limited if the financial aid staff member is not confident of the student’s identity.

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 (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 Reasonable Academic Progress (RAP) standards as defined by the VCU Office of Financial Aid (the full VCU RAP policy is available online at http://www.vcu.edu/enroll/finaid/progress).
- 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 the 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 at http://studentaid.ed.gov/students/publications/student_guide/index.html.

Applying for financial aid
The financial aid application process for the academic year begins Jan. 1. All students are encouraged to complete and submit the FAFSA as soon as possible after Jan. 1, designating VCU (school code 003735) to receive the results. In order to reduce problems, errors and omissions on the FAFSA, students are encouraged to apply electronically using FAFSA on the Web (available online at http://www.fafsa.ed.gov/). Once the FAFSA is filed, the federal processor will send the student a Student Aid Report (SAR) or electronic SAR Acknowledgement, and also will electronically send the information to the VCU Office of Financial Aid, if VCU was listed as a school to receive the data. If additional information is needed to complete processing of the application, the VCU Office of Financial Aid will send the student a request for additional information. Responding promptly to such requests will ensure timely processing of the application. Once the review of FAFSA data has been completed, the Office of Financial Aid will send the student a Financial Aid Notification.

Please note that health profession students (dentistry, medicine, nursing or pharmacy) must provide both student and parental information on the FAFSA to apply and receive consideration for Title VII grants and loans from the Department of Health and Human Services.

**Priority filing dates**

The VCU Office of Financial Aid recommends electronically filing the FAFSA by March 1*.

Students should complete the FAFSA using data from their completed tax returns. If necessary, they may use estimated tax return data in order to meet the VCU priority filing date but should be prepared to submit a copy of their completed tax returns and W2 forms to VCU as soon as possible. Students will receive their Financial Aid Notification after their FAFSA application data has been verified. If students have not applied for financial aid in a timely manner, they may want to participate in the VCU Installment Payment Plan, which budgets each semester’s bill over four payments. Information about this plan can be found on the Student Accounting Department’s Web site (http://www.vcu.edu/enroll/sa/payment/ipp.html).

* Students who do not have access to the Web may apply using the paper FAFSA, available through VCU, high schools, colleges and most public libraries. Those students completing a paper application should mail it to the federal processor by Feb. 1.

**Summer studies**

Limited financial aid may be available during the summer semester. Students applying for the summer semester must file the FAFSA by March 1. Students interested in financial aid for the summer semester should obtain a VCU Summer Studies Schedule of Classes (available in March) for more details.

**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 financial aid counselor to coordinate aid for their study abroad program. Information about financial aid and study abroad is available online at http://www.vcu.edu/oie/eao/admin_matters/ea_financial_aid.html.
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, the student (and the student’s parents or spouse, if applicable) agreed 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.

University bill

The Student Accounting Department sends bills for tuition, fees and other university charges to students whose financial aid will not cover their 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 hold a student from registration for courses.

Financial aid appeals

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 unusual circumstances:

- loss or reduction of employment earnings
- disability or death of parent or spouse
- separation or divorce
- loss or reduction of untaxed income
- losses due to a natural disaster
- unusually high educational program costs
- 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.

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 student’s 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 tuition/fee bill that was previously paid by financial aid sources.

Examples are available online (go to http://www.vcu.edu/enroll/finaid/links and click on "Financial aid implications if you withdraw from VCU").

Reasonable Academic Progress

To be eligible to receive financial aid at VCU, students must make Reasonable Academic Progress (RAP). RAP is a combination of qualitative and quantitative components and is measured by completion rate. The completion rate is the number of credit hours earned divided by the number of credit hours attempted. All students must successfully complete at least 67 percent of all credit hours attempted (withdrawals, incompletes and repeated courses also are considered attempted credit hours).

The Office of Financial Aid will perform a periodic RAP review for students who receive or apply for financial aid. The reviews are typically performed at the end of the spring semester and must be completed at least once per academic year.

Students will be alerted with warning letters, whenever possible, to provide them with notice that their financial aid may be in danger of being suspended. When students fail to meet RAP requirements, they will receive suspension letters 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 RAP.

For more detailed information about the VCU Reasonable Academic Progress policy, visit the Office of Financial Aid Web site (http://www.vcu.edu/enroll/finaid/progress).

Types of financial aid

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 federal loan programs provide the most dollars. Federal loans must be repaid after the grace period and/or deferment periods have expired. Students must generally remain enrolled at least half-time (five credit hours for graduate students). Multiple repayment plans may be available for most federal loans. Selected loan programs include:

- Federal Direct Loan (subsidized and unsubsidized)
- Health Professions Student Loan
● Loan for Disadvantaged Students
● Nursing Student Loan
● Primary Care Loan

Grants

Contact individual academic departments for information about grant or scholarship programs.

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 off-campus locations. Hourly wages will vary depending on skills and experience. Job listings are posted to the Career Center’s Web site (http://www.students.vcu.edu/careers). When interviewing for work-study positions, students should take copies of their Financial Aid Notifications to show prospective employers.

Veteran and reservist educational benefits

Available veteran and reservist educational assistance programs include:

● Montgomery GI Bill – Active Duty (Chapter 30)
● Vocational Rehabilitation (Voc Rehab, Chapter 31)
● Veterans Education Assistance Program (VEAP, Chapter 32)
● Survivors’ and Dependents Educational Assistance Program (DEA, Chapter 35)
● Montgomery GI Bill – Selected Reserves (Chapter 1606)
● Tutorial Assistance Program
● VA Work-Study Program
● Virginia War Orphans Education Program (WOE)
● Diplomatic Security and Antiterrorism Assistance

Detailed information about eligibility for these programs is available on the Web (http://www.vcu.edu/enroll/vets_benefits). To obtain printed material, contact:

Veterans Affairs Office
Office of Financial Aid
901 W. Franklin St., Room 113
Richmond, VA 23284-3026
(804) 828-6166
Fax (804) 827-0060
E-mail: jmchambe@vcu.edu or faidmail@vcu.edu

Eligible veterans must comply with the following requirements to receive educational benefits as students:

1. The veteran must apply or be accepted into a degree- or certificate-seeking program.
2. The veteran must request certification after registering for courses each semester and each summer session from the Veterans Affairs Office.

3. The veteran may be eligible to use benefits for only those courses applied toward a degree or certificate program.

4. The veteran is not eligible to use benefits for courses taken on an audit basis. If repeating a course or taking a course with no credits, the veteran must notify the Veterans Affairs Office.

5. The veteran is responsible for ensuring that transcripts are evaluated for transfer credits to be accepted by VCU. The veteran must submit this information to the Veterans Affairs Office for transmittal to the Veteran’s Administration Regional Office.

6. The veteran must notify the Veterans Affairs Office if planning to drop or withdraw from classes or stop attending VCU.

**Virginia War Orphans Education Program**

The Virginia War Orphans Education Program provides educational assistance for children of certain veterans or service personnel. Applications are available at the VCU Veterans Affairs Office. Students should begin the application process at least four months before beginning studies at VCU.

Eligibility for this assistance is contingent upon the following:

1. the applicant must be no less than 16 and no more than 25 years old,

2. one of the applicant’s parents must have served in the U.S. Armed Forces and must be permanently or totally disabled due to war or other armed conflict, or

3. one of the applicant’s parents died as a result of war or other armed conflict, or

4. one of the applicant’s parents is listed as a prisoner of war or missing in action, or

5. the applicant’s parent, on which eligibility is based, has been a resident of Virginia at the time of entry into active military duty, or

6. the applicant’s parent, on which eligibility is based, has been a resident of Virginia for at least 10 consecutive years immediately before date of application, or

7. the surviving parent has been a resident of Virginia for at least 10 years prior to marrying the deceased parent, or must have been a resident of Virginia for at least 10 consecutive years immediately prior to the date on which the application was submitted by or on behalf of such child for admission to any educational or training institution in Virginia.

Those eligible for the Virginia War Orphans Education Program are entitled to a tuition-free education at state-supported educational or training institutions on an annual basis. (Summer school also may be included in the annual certification of students.) Eligible students can use this benefit to pursue any vocational, technical, undergraduate or graduate program of instruction. Generally, programs listed in the academic catalogues of state-supported institutions are acceptable provided they have a clearly defined educational objective, i.e., certificate, diploma or degree.
Professional programs tuition and student fees

Students must pay all applicable tuition, room, board and other fees when due, as described in this section. Students who fail to pay these charges on time may be assessed a late payment fee. The university reserves the right to revise or alter all tuition and fees, regulations pertaining to student fees, and collection procedures at any time. In addition to expenses billed by the university, students should make allowances for books, clothing, supplies, travel and other out-of-pocket costs when figuring their total yearly expenses at the university.

Student financial responsibilities

Students who enroll:

- are responsible for full payment of tuition and fees generated from their registration.
- are responsible for full payment of all room, board and other applicable miscellaneous charges.
- are responsible for keeping a current permanent mailing address on file with the Office of Records and Registration. Failure to receive an invoice because of an incorrect address does not relieve responsibility for timely payments.
- are responsible for establishing an official VCU e-mail address and reading their e-mail on a regular basis, since e-mail will be used by faculty and university offices to deliver important communications.

Tuition and fees are categorized and described on the Student Accounting Web site at http://www.vcu.edu/enroll/sa/ tuition.

All charges are subject to change by decision of the Board of Visitors.

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 the same 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. It is determined and assessed by the Student Government Association 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.

**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.

**Off-campus fees**

The university fee, the student activity fee, the student government association fee (except School of Social Work) and the student health fee are not charged to students taking off-campus classes.

**Special fee charges**

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 at [http://www.vcu.edu/enroll/sa/](http://www.vcu.edu/enroll/sa/) or to the specific school or department section in 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.

**In-state residency**

Eligibility for in-state tuition benefits is determined by Section 23-7.4 of the Code of Virginia. Refer to the Welcome section of this bulletin for the complete code.

All applicants to VCU who want to be classified as Virginia residents must complete the
Application for Virginia In-state Tuition Rates included in the graduate application. The residency determination of the applicant will be conveyed at the time of admission.

New students who have been classified initially as non-Virginians for tuition purposes may request a review of the initial residency determination by contacting Records and Registration/Residency, (804) 828-0366. The residency officer may request that the applicant complete a Student Supplemental Application for Virginia In-state Tuition Rates and submit supporting documents for additional clarification. Continuing students desiring a change of residency status to in-state tuition rates must submit the supplemental application along with supporting documentation. Requests and applications for a second review must be submitted to the residency officer by the last day of add/drop week for each semester; however, it is strongly recommended that applications be submitted by the appropriate deadline: fall semester, Aug. 1; spring semester, Dec. 1; summer session, May 1.

Students will be notified by mail of decisions regarding residency status. The Financial Aid and Student Accounting departments also will receive official notification of residency decisions. Any denial for a change in residency status will include procedures for appeal of the intermediate decision. Students who submit fraudulent applications, falsify documentation or conceal information will be subject to reclassification, payment of all nonresident fees owed and university discipline.

**Student billing**

The Student Accounting Department issues bills to students showing charges for the following fees: tuition, student activities fee, student government association fee, technology fee, university fee, private music lessons, school major fees, special course fees, course materials fees, dental kits, disability insurance, room rent, board fees, communication fees, student health fee and study abroad fees.

Tuition and fees for preregistered students, along with charges for room and board where applicable, are due by the beginning of each semester. All other students will be billed after the registration period and should pay upon receipt of the invoice.

Students who have enough financial aid to cover their charges will not be sent bills. Students with current charges of $100 or greater are eligible to participate in the university’s Installment Payment Plan, offered during the fall and spring semesters. The Installment Payment Plan distributes the cost of tuition, fees, room and board, and communications fee for the semester into four equal installments. The fee per semester is $25, paid with the first installment. An application and information about how to sign up for the payment plan will be included with the bill.

**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, which may create a balance due to the university.
Withdraw – results in the academic grade of "W." Charges are assessed and adjusted according to the University Refund Policy. Students may owe a balance to the university.

Refund of tuition and fees

The official university tuition and fee policy applicable for the fall and spring semesters only (excluding short courses) is outlined below. Refunds are calculated on a course-by-course (per credit hour) basis, disregarding the full-time cap amounts. Students who are enrolled full time and withdraw from courses may not receive a refund.

- Students dropping/withdrawing from courses through the first week of class will be entitled to a 100 percent refund of tuition and fees.
- Students withdrawing from courses through the second week of class will be entitled to an 80 percent refund of tuition and the university fee.
- Students withdrawing from courses through the third week of class will be entitled to a 60 percent refund of tuition and the university fee.
- Students withdrawing from courses through the fourth week of class will be entitled to a 40 percent refund of tuition and the university fee.
- Students withdrawing from courses after the fourth week of class are not entitled to receive a refund of tuition and fees.

Students in off-campus courses are subject to the same refund policy as all other university students if the class is scheduled on the regular semester schedule. If the off-campus course is shorter or longer than the academic semester, the refund dates are adjusted accordingly at the request of the Off-campus Programs Office.

The refund policy and deadlines of the English Language Program (ELP) are different from the university’s refund policy for academic courses. Details of the policy may be obtained from the English Language Program Office.

A full refund for Holiday Intersession will be granted if the course is dropped before 4:30 p.m. on the day of the first class meeting. 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 policy also is applicable if the class does not meet on two consecutive days.) Students reducing their academic course loads to less 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. Partial refunds are not granted for the summer session. This same refund policy also applies to short courses offered during the fall and spring semesters.

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 Federal Financial Aid Refund Policy. The remaining credit balance, if any, will be refunded to the student.

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 Refund Appeals Committee within five years.

Students will not be entitled to a refund of room fees if:

- they are suspended from the residence halls for disciplinary reasons.
- they voluntarily withdraw from the university residence halls but remain registered for any course(s) at the university unless clearance is granted through the Housing/Residence Education Office, unless they have completed the withdrawal procedures through the Housing Office.

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 Board Contract Terms and Conditions sheet 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, 827 W. Franklin St., Room 104 or 1101 E. Marshall St., Room 1-055.

In accordance with credit card regulations, the university will refund any credit balance that may result on a student’s account as the outcome of a credit card payment back to the credit card account. 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.

**Outstanding charges**

Students who fail to meet payments when due will be assessed late payment penalties and will be denied registration for future classes until they have paid all accrued amounts owed. Students with balances owed to the university will not be issued degrees, transcripts of grades or graduate reports until all charges are paid in full.

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, Virginia Commonwealth University, P.O. Box 843036, Richmond, VA 23284-3036.

Pursuant to Section 2.2-4805 et seq., of the Code of Virginia, and in accordance with rules and regulations promulgated by the state comptroller and attorney general of the commonwealth of Virginia, VCU will charge interest, costs and fees on all accounts past due.

VCU is participating in the Virginia Set-off Debt Collection Act of 1981. Under the provisions of
this act, a Virginia individual income tax refund will be subject to the university’s claim for unpaid balances of tuition and fees.

A student who pays a past due balance with a dishonored check may be subject to cancellation of his or her current and/or future registration. A charge is levied for all dishonored checks.
Each member of the VCU community has certain responsibilities, rights and privileges. These are stated in some detail in the VCU Rules and Procedures, and all students are responsible for being familiar with provisions of this document. The rules and procedures are printed in the campus calendar and also are available at the Office of the Dean of Student Affairs. This document also provides for the process whereby disciplinary action, including separation from VCU, may be taken against a member of the university community as a result of behavior that is in violation of the prohibited conduct as stated in the VCU Rules and Procedures.

Students at VCU have a right to appeal actions of an academic nature. If such action involves a course grade, the Grade Review Procedures should be followed. If such action involves computing, the Computer Ethics Policy should be followed. If such action involves dishonesty, the Academic Integrity Policy for Monroe Park Campus students should be followed.

All students enrolled in courses on the MCV Campus are subject to the VCU Honor System. Copies of the Honor Code are available in Office of Records and Registration, Sanger Hall, Room 1-055, and the Office of the Associate Dean of Student Affairs, MCV Campus, Bear Hall, Room 104.

In addition to those standards of conduct described in VCU Rules and Procedures and the MCV Campus Honor Code, which applies to all students enrolled on the MCV Campus, a student enrolled at the university may be dismissed from the school in which enrolled for failure to meet prescribed academic program requirements. Students appealing termination from a graduate program/department should first pursue appeals at the department and/or the school level. After receiving a decision from the department and/or school, a student has the option of filing an appeal with the dean.

VCU seeks to foster insight, imagination, creativity, resourcefulness, diligence, honesty and responsibility as well as the education of the men and women enrolled in its graduate programs. Such an enterprise can take place only where the highest standards of academic integrity exist.

Academic dishonesty is the giving, taking or presenting of information or material by students with the intent of unethically or fraudulently aiding themselves or others on any work that is to be considered in the determination of a grade or the completion of academic requirements. Students in doubt regarding any matter related to the standards of academic integrity in a given
course or on a given assignment should consult with the faculty member responsible for the course before presenting the work.

**Effective bulletin**

The bulletin of record for a professional student is the Graduate and Professional Programs Bulletin in effect at the time of the student’s official admission to the degree program (as specified in the student’s official letter of admission). The effective bulletin contains the official requirements that the student must complete to earn the degree. A student who does not maintain continuous enrollment must reapply to the program and will be subject to the requirements of the bulletin in effect at the time of readmission. Exception to this policy must be approved by the student’s dean or dean designee.

**Immunization requirements**

VCU requires that all full-time students supply validated immunization records to University Student Health Services. This requirement must be completed prior to registering for a second semester. Failure to meet these state law requirements will result in a hold placed on the student’s second semester registration. The hold can be removed only upon receipt of the student’s documented records.

The immunization record must be completed fully and accurately and also must be accompanied by documentation that the vaccines were given. This completion may be done in several ways. For example:

1. students may have their physicians transfer the information from their medical records and sign the forms verifying their accuracy, or
2. students may complete the forms using information received from their local health departments or from the armed services, but they then must attach validated copies of supporting documentation.

Many high schools require validated immunization records from students. If students recently have graduated from high school, their immunization records may still be available. They may request that the high school provide them with a copy of their immunization records.

If students cannot provide documented evidence of full immunization according to VCU guidelines, then the students must see their family physicians or health departments and receive updated immunizations. Most city and county health departments offer immunization clinics (Richmond City Health Department, 500 N. 10th St., Room 114).

Immunity to the following diseases must be documented as specified on the forms supplied by the Graduate School with the formal offer of admission.

**Tetanus.** Documentation of (1) is requested. Documentation of (2) is required. (1) Primary immunization series, including month/day/year of each dose, and (2) Tetanus/diphtheria (Td) booster (month/day/year) within the past 10 years.

**Diphtheria.** Documentation of both (1) and (2) is requested. (1) Primary immunization series,
including month/day/year of each dose, and (2) Tetanus/diphtheria (Td) booster, including month/day/year within the past 10 years.

**Polio.** (1) Primary immunization with a total of three doses of OPV (oral Sabin) or (2) primary immunization with a total of four doses of IPV (injected Salk). Note: Documentation of prior vaccination against polio, including month/day/year of each dose, is requested; however, if not completed in the past it is not recommended that the student complete the primary polio series unless the student is less than 18 years old or is planning travel to an area endemic or epidemic for polio.

**Rubeola (Measles).** Documentation of one of the following is necessary: (1) Born before 1957 and, therefore, considered immune, (2) two doses of the measles vaccine both administered after 1967 and given after the first birthday at least one month apart (document month/day/year), (3) physician’s certification of diagnosis of measles including month and year of occurrence, or (4) documentation of immune titer proving immunity. Note: Measles vaccine given before 1968 is not acceptable.

**Mumps.** Documentation of one of the following is necessary: (1) mumps vaccine given after age one, month/day/year documented, (2) copy of report of immune titer, proving immunity, (3) physician’s certification of diagnosis of mumps, including month and year of occurrence or (4) birth prior to 1957 (presumption of immunity).

**Rubella (German Measles).** Documentation of one of the following is necessary: (1) Rubella vaccine given after one year of age (document month/day/year) or (2) copy of report of immune titer proving immunity. Note: A history of disease is not acceptable. Rubella vaccine given before June 9, 1969 is not acceptable.

**TB Skin Test** (ppd) must be performed at University Student Health Service Office once student is attending classes.

**Meningococcal vaccine** is recommended to freshmen students residing in dormitories. The vaccine is available to any student wishing to reduce their risk for the disease.

Students with questions should contact the immunizations staff of University Student Health Service.

Students should refer to the appropriate professional program dean’s office for information on other immunization requirements.

MCV Campus  
VMI Building, 1000 E. Marshall St., Room 305  
P.O. Box 980201  
Richmond, VA 23298-0201  
(804) 828-9220

**Withdrawal policies**

**Leave of absence**
Students may request a leave of absence from a program through written appeal to their advisers. The adviser will forward the request, following departmental governance procedures, along with a recommendation to the dean, who will respond for the university. Students who do not register for courses for more than one calendar year and who have not been granted a leave of absence must reapply for admission to VCU and to the degree program.

Withdrawal from the university

To withdraw officially from VCU, a student must submit a complete Official Withdrawal Form to Records and Registration before the end of the eighth week of classes. The Official Withdrawal Form is obtained from Records and Registration, 827 W. Franklin St., Room 104. Failure to complete this form may result in the assignment of failing grades in all or some of the courses. The student’s permanent academic record will indicate a grade of withdrawn ("W") for all courses in which the student was enrolled.

Health-related withdrawals

While students are expected to work toward completion of their degrees without interruption, health-related problems may necessitate withdrawal from the university.

- Some schools require a statement from a physician indicating the nature and severity of the condition, when a student should stop attending classes, and the estimated date of return to school.
- In the event that a student’s health problem poses a danger to the student, to patients or to others with whom the student may come in contact and the student is unable or refuses to initiate steps to withdraw as stated above, administrative withdrawal of the student may be made by the dean upon consultation with the appropriate faculty and a qualified physician.
- Because curricular and course content changes may occur and a student’s progress toward a degree may be affected adversely because of an extended absence, specific time periods may be imposed by individual schools with respect to the length of time allowed for absence from school. If there is a delay in return beyond the allotted time period without written consent of the dean, the student may petition for return with advanced standing.
- Some schools require that prior to return to school, the student must submit to the dean a statement from a physician. This statement should document that the condition that necessitated the withdrawal has been corrected to a point where the student can complete successfully all curriculum requirements with reasonable accommodation including classroom, laboratory, clinical and fieldwork experience.

Grade review procedure

If a student thinks that a grade is inaccurate, the situation should be discussed with the faculty member. This will allow the faculty member to explain how the final grade was determined and, if an error is detected, to submit a change of grade.

If the student still thinks that the grade was assigned unfairly, a written appeal should be submitted to the department chair. Upon receipt of the written appeal, the department chair shall provide the student with a copy and explanation of the Grade Review Procedure and shall
ensure that the requirements of the Grade Review Procedure are followed.

If the department chair is unable to resolve the complaint, then the dean of the school in which the course was offered will form a grade review committee as described in the Grade Review Procedure policy and will submit its decision to the dean of the school. The decision communicated by the dean of the school in which the program resides is the final decision and will be distributed to the student, faculty member(s) and department chair.

In cases concerning grades awarded for the fall semester, the written appeal must be submitted to the department chair no later than 30 calendar days after the beginning of the following spring semester. In cases concerning grades awarded for the spring semester or summer sessions, the written appeal must be submitted no later than 30 calendar days after the beginning of the following fall semester.

**Grading system**

Work quality is measured by the four-point grade system with the following equivalents:

<table>
<thead>
<tr>
<th>Grade symbol and meaning</th>
<th>Grade-point value per semester credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
</tr>
<tr>
<td>P/F (Pass/Fail)</td>
<td>0.0</td>
</tr>
<tr>
<td>PR</td>
<td>0.0</td>
</tr>
<tr>
<td>S/U (Satisfactory/Unsatisfactory)</td>
<td>0.0</td>
</tr>
</tbody>
</table>

All other grades are temporary, carry no credit and are not used in the computation of a GPA. Refer to the following pages for an explanation of the use of the grades of satisfactory and unsatisfactory in relation to thesis/dissertation/research classes.

The number of grade points earned is computed by multiplying the grade-point value for the letter grade by the number of semester credits for the course. As an example, a student receiving an “A” (i.e., four grade points) in a three-credit course receives 12 grade points. The grades of accepted transfer courses are not included in the computation of the VCU GPA. Graduate students are not designated as special honors graduates (i.e., cum laude, magna cum laude, summa cum laude) on transcripts or diplomas upon completion of their programs.

No graduate student shall be awarded degree credit for remedial work. Students advised to take any level course for remedial work should be notified in writing that the course credit shall not apply to the degree they are pursuing. Other bodies may rule later, should the student wish to apply the credit to some other degree.

**Grade of audit (AU)**
Class size permitting, students may register for courses on an audit basis. A student may register for audit only during add/drop and late registration periods as a new registration and not as a change from credit to audit. 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 eight-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 in terms of classification as a full-time student. Courses taken for audit, however, do not satisfy minimum enrollment requirements for students receiving graduate teaching or research assistantships, graduate fellowships, or university graduate scholarships.

**Grade of continued (CO)**

The grade of "CO" may be assigned as an interim grade for those courses that run over several grade reporting periods. The "CO" indicates that the course is not expected to be completed in a single semester and that students must reregister for the course. Upon completion of the course, a final grade will be assigned to the current semester, and the previous "CO" grade(s) will remain. This grade may be assigned only in courses approved for such grading.

**Grade of incomplete (I)**

If because of circumstances beyond their control, students are unable to meet all the requirements of a course by the end of a semester, the mark of incomplete ("I") may be given. The awarding of a mark of "I" requires an understanding between instructor and student as to when and how the course will be completed. This understanding must be recorded on an Incomplete Grade Assignment Form that is submitted instead of a final course grade. The maximum time limit for submission of all course work necessary for removal of an incomplete is the end of the last day of classes of the next semester following the semester in which the incomplete was incurred (i.e., an incomplete awarded in the fall semester must be converted by the last day of classes in the spring semester, and an incomplete awarded in the spring or summer session must be converted by the last day of classes in the fall semester). At that time, an unremoved grade of incomplete is changed automatically to a failing grade. Individual departments and schools may have more stringent time limits. An extension of the time limit is possible, but must be approved, prior to the expiration date stated above, by the instructor and the dean of the school through which the course is offered. Written approval indicating the new time limit must be filed with the dean.

**Grade of pass (P)**

This grade is awarded for certain courses to denote satisfactory completion of requirements. Courses assigned the grade of "P" will not be computed in the GPA.

**Grade of progress (PR)**

The mark of "PR" may be assigned only in courses approved for such grading. Unlike the mark of
“I,” “PR” will not automatically be changed to a failing grade at the end of the succeeding semester.

Grades of satisfactory (S), unsatisfactory (U) or fail (F) in research, thesis and dissertation courses

All research, thesis, and dissertation credits taken as part of the final project (thesis/dissertation/project) for awarding a graduate degree are to be graded each semester as “S,” “U” or “F.” There is no limit to the number of these credits a student may take while pursuing completion of the degree as long as the student receives a grade of “S” for each credit. An individual department may terminate a student who does not progress satisfactorily as indicated by a “U” grade in research, thesis/dissertation/project course work. A student who receives a final grade of “F” in the thesis or dissertation will be terminated from the graduate program.

Grade of withdrawn (W)

The grade of “W” indicates that the student has officially withdrawn from a course or has been dropped for nonattendance. No student who has officially withdrawn from a course or who has been dropped for nonattendance may attend subsequent meetings of the course.

Course listings

Identification of symbols

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>A course offered in the first</td>
</tr>
<tr>
<td></td>
<td>semester</td>
</tr>
<tr>
<td>II</td>
<td>A course offered in the second</td>
</tr>
<tr>
<td></td>
<td>semester</td>
</tr>
<tr>
<td>I, II</td>
<td>A course offered in each</td>
</tr>
<tr>
<td></td>
<td>semester</td>
</tr>
<tr>
<td>I and II</td>
<td>A course continued through</td>
</tr>
<tr>
<td></td>
<td>two semesters</td>
</tr>
<tr>
<td>S</td>
<td>A course offered in summer</td>
</tr>
<tr>
<td></td>
<td>sessions</td>
</tr>
</tbody>
</table>

Course interpretation

A single number listing for a course, such as MGMT 648, indicates that 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 THEA 603, 604 and designated as semester courses, consist of two one-semester courses, either semester of which may be taken without the other.

Courses listed with a double number, such as APPM 575-576, are designated as continuous courses and 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. The university reserves the right to withdraw any course or program.

Course numbering
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 offered for students to make up deficiencies in previous training or to improve certain basic skills.

**1XX and 2XX undergraduate, lower level**

Courses with these numbers are 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 that usually constitute the major portion of specific program work leading to the baccalaureate degree. On occasion, graduate students will be advised by their graduate advisers to enroll in prerequisite 4XX courses. Graduate programs can require that 400-level courses be taken, but credit hours in these courses cannot count toward the graduate degree or in the graduate GPA (effective fall 2004).

**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 professional graduate courses**

First year, first professional (medicine, dentistry, pharmacy and physical therapy) courses normally open to students enrolled in the M.D., D.D.S., Pharm.D. and D.P.T. 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 (medicine, dentistry, pharmacy and physical therapy [second and third year]) courses normally open only to students enrolled in the M.D., D.D.S., Pharm.D. and D.P.T. 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 (medicine, dentistry and pharmacy) courses normally open only to students enrolled in the M.D., D.D.S. and Pharm.D. programs. Certain courses of this group may be designated by the department and approved by the Graduate Council for graduate credit.

MCV Campus programs

Warning, probation and suspension are defined by the program of study. Consult program adviser for further details.
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. These mutual initiatives will enhance the research and mentoring opportunities for faculty and students at the undergraduate, graduate and professional levels.

VCU Life Sciences is in the process of establishing new degree programs that directly address the need to prepare students for the exploding growth in careers in the life sciences. The solution will require highly interdisciplinary and multidisciplinary approaches, often falling between the boundaries of traditional academic disciplines. It will require increasing emphasis on systems biosciences as an important complement to more traditional, purely reductive approaches. VCU Life Sciences will offer degree programs that include bachelor’s degrees, combined bachelor’s-master’s degrees, master’s degrees and doctoral degrees. The establishment of these programs will create opportunities to combine professional programs with graduate curricula. Refer to the Graduate School Web site at http://www.vcu.edu/graduate for updates on the proposed graduate degree programs.

For more information concerning proposed graduate programs, faculty and facilities, refer to the VCU Life Sciences section of this bulletin.
Dietetic internship

A post-baccalaureate, accredited dietetic internship is offered through the VCU Health System’s MCV Hospitals. Qualified applicants must have completed an undergraduate or graduate program in dietetics. For additional information contact the Dietetic Internship Director, MCV Hospitals, Virginia Commonwealth University Health System, P.O. Box 980294, Richmond, VA 23298-0294.
Master of Interdisciplinary Studies

The Master of Interdisciplinary Studies (M.I.S.) degree program provides an opportunity for the highly motivated student to pursue a unique course of study that combines graduate course work in a learner-centered approach to graduate education. The student is an active participant in proposing a curriculum that supports an individualized and scholastically rigorous academic goal in a clearly defined, multidisciplinary program. To expand the program's range of options and interdisciplinary perspectives, the program allows for cooperative ventures with other approved colleges and universities.

M.I.S. programs of study

Opportunities for interdisciplinary study in the M.I.S. degree program currently include:

- Individual programs of study (developed with director of M.I.S. program)
- Interdisciplinary Arts/Off-campus program with a focus in studio art
- Mathematics and Science Leadership/K-8 mathematics specialist track

Application for admission

Applicants to all Master of Interdisciplinary Studies programs of study must complete the VCU Graduate School Application to Graduate Study (http://www.vcu.edu/graduate/ps/apply_options.html). Completed applications and all supporting documentation must be submitted to the VCU Graduate School according to the instructions provided on this Web site.

Students should refer to the Graduate Admissions Summary Chart on the Graduate School Web site for a summary of current contact information, semesters of entry, application deadlines, testing requirements, and special or supplementary requirements for each M.I.S. program of study.
study (http://www.vcu.edu/graduate/ps/adm_req_summary.html).

Admission criteria for all M.I.S. programs of study

General admission requirements to the Graduate School and all M.I.S. programs of study include:

- graduation from an accredited college or university or its equivalent.
- a 2.8 cumulative GPA for at least the last two years (or last 60 hours) of undergraduate work.
- satisfactory scores from a current (fewer than five years old) standardized test commonly used and deemed appropriate by the relevant discipline.
- three letters of recommendation.
- applicant’s written statement of intent for pursuing graduate studies.
- completion of a proposed curriculum plan outlining the applicant’s specific course of study. When finalized, this plan is the official statement of the student’s program requirements for completion of the M.I.S. degree.

General M.I.S. program requirements

The initial curriculum plan proposed at the time of application must be finalized with the program director or track coordinator by the end of the first semester of study. Any subsequent changes in the curriculum plan must be made with the program director or track coordinator’s approval.

In addition to any admission or individual course prerequisites, students enrolled in M.I.S. programs of study must complete a minimum of 39 graduate semester credits, including:

- at least nine, and not more than 15, graduate semester credits in each of at least two disciplines. No more than 15 credits in any one discipline (exclusive of directed research, independent study, special project or thesis requirements) may be applied toward the degree.
- a minimum of three credits in a research methods course relevant to the final research project.
- three to six graduate credits of approved directed research, independent study, special project or thesis work. Formal approval for the final research project must be obtained from the director or track coordinator before the student begins the final project.
- up to six semester hours of graduate course work (nine from Virginia State University) for transfer from other accredited institutions with the approval of director or track coordinator. (See Mathematics and Science Leadership/K-8 mathematics specialist track section for information regarding transfer course work.)
- at least 50 percent of the course work taken at the 600 level or higher.
elective course work approved by the program director or track coordinator as part of the official curriculum plan.

- a maximum of six hours taken as a nondegree-seeking student before admission to the program.

**Graduation requirements**

Candidates for degrees are eligible for graduation upon completion of all academic requirements in effect at the time of the first registration in the program, provided they are continuously enrolled and provided the requirements are met within the time limit specified by the school or program. Students failing to satisfy the time requirement and who are readmitted to a program shall satisfy requirements in effect at the time of reacceptance into the program.

All graduate students are subject to the admission and academic standards that govern graduate study at VCU as determined by the University Graduate Council and as articulated in the Graduate Studies at VCU section of this bulletin. A checklist summarizing academic policies and requirements for graduation, as well as instructions and guidelines for applying to graduate, is available on the VCU Graduate School Web site http://www.vcu.edu/graduate/es/graduation.html.

**Additional track-specific admission requirements**

In addition to the Graduate School’s general requirements for admission and academic standing, as articulated in the Graduate Studies at VCU section of this bulletin, and general M.I.S. admission criteria and program requirements, applicants to M.I.S. programs must complete any track-specific requirements as indicated in the following sections.
Individual programs of study

The Master of Interdisciplinary Studies degree program provides an opportunity for the highly motivated student to develop an individualized program of study that combines graduate course work in two or more selected disciplines. This opportunity is available for graduate students who wish to pursue a clearly defined, multidisciplinary program that does not duplicate an existing professional curriculum or specialization in a traditional program.

Admission requirements

In addition to the general VCU Graduate School requirements and the general requirements for admission to the M.I.S program, applicants who are proposing an individualized course of study must:

- submit satisfactory scores on the GRE from a current test (fewer than five years old). Substitutions of other standardized test scores may be made on a case-by-case basis, depending upon the focus areas identified in the curriculum proposal and the approval of all members of the admission committee.

- articulate in the written statement of intent the applicant's academic goal and how the M. I.S. degree program will facilitate the achievement of that goal. In some cases, applicants may want to address how a more traditional program does not meet their specific academic goals.

- complete a preliminary curriculum proposal form identifying the specific course work that will support the academic goal articulated in the written statement of intent. This form is available on the Master of Interdisciplinary Studies Web site at http://www.vcu.edu/graduate/s/master_inter.html.

Students who are interested in working toward a degree are encouraged to apply to the program as early as possible, since a maximum of six credit hours taken as a nondegree-seeking student may be counted toward the degree.

Members of the admission committee include the directors of graduate study of the two focus areas identified in the curriculum proposal and the director of the M.I.S. program. To facilitate the application process, M.I.S. applicants who are proposing an individualized program of study are strongly encouraged to schedule a preliminary advising interview with the director of the M.I.S. program to discuss their academic goals and curricular proposals.

Program requirements
In addition to the general M.I.S. degree requirements, students who are admitted to an individual M.I.S. program of study must:

- obtain approval for all transfer and elective course work as part of the formal advising process for developing and/or changing the approved curriculum plan
- complete a minimum of three graduate credits in a research methods course relevant to the final research project before beginning the final research project; and
- complete three to six graduate credits as part of the final research project in the form of an approved directed research, independent study, special project or thesis. Students who choose the thesis option must identify a thesis adviser and committee before beginning formal work on the thesis. The student will follow the thesis guidelines of the school/program of the thesis adviser, as well as the general guidelines for completion of theses/dissertations as prescribed by the Graduate School, the University Graduate Council and VCU Libraries [http://www.vcu.edu/graduate/es/thesis.html](http://www.vcu.edu/graduate/es/thesis.html). Students who choose the directed research option must obtain formal approval for the final research project. Before beginning formal work on the thesis or the final directed research project, the student must submit to the director of the M.I.S. program a copy of the proposed project, along with a signed copy of the Final Project Proposal Approval form (available on the M.I.S. Web site at [http://www.vcu.edu/graduate/s/master_individual.html](http://www.vcu.edu/graduate/s/master_individual.html)).
Interdisciplinary Arts/Off-campus program

The School of the Arts and the Office of Community Programs jointly administer the M.I.S. Interdisciplinary Arts/Off-campus program with a focus in studio art. This program provides an opportunity for the off-campus student to earn a graduate degree by combining art courses, both studio and academic, within established guidelines. The program is not the equivalent of a Master of Fine Arts degree; it does, however, provide an additional option for qualified persons, especially art teachers, who are interested in studio art classes. Focus areas include, but are not limited to, crafts, computers and the arts, painting, photography, printmaking/drawing (may not be selected in combination with painting), and sculpture.

Off-campus graduate art classes are offered at a variety of sites from Fairfax County, Va., to Virginia Beach — in the late afternoon during the regular school year and in all-day workshops during the summer. Both studio art and art education courses are offered. Open to all qualified students, these courses may be used for personal enrichment, license renewal or as part of a degree program. Most of the participants in the off-campus art classes are public school teachers. An exciting aspect of the program is that their students begin to benefit immediately as the teachers transfer renewed skills, knowledge and creative excitement to their own classrooms.

Admission requirements

An admissions committee in the School of the Arts will review applications to the M.I.S. Interdisciplinary Arts program of study. The committee will look for demonstrated strength in at least one discipline. In addition to general VCU Graduate School requirements for admission and the general requirements for admission to the M.I.S program, applicants to the M.I.S.

Interdisciplinary Arts program must:

- have taken a minimum of 36 undergraduate and/or graduate studio credits;
- in lieu of a standardized test, prepare a minimum of 10 slides, demonstrating excellence in at least one discipline, but preferably in more than one; and
- articulate in the written letter of intent interest in working in at least two disciplines in order to explore interdisciplinary potential in the arts.

Many students prefer to take a course before deciding to apply to the M.I.S. degree program. Students who are interested in working toward a degree are encouraged to apply to the program as early as possible, however, since a maximum of six credit hours taken as a nondegree-seeking student may be counted toward the degree.
Program requirements

In addition to the general M.I.S. degree requirements, the Interdisciplinary Arts track requires the completion of 39 graduate semester credit hours as follows:

- at least nine and no more than 15 semester hours in each of two focus areas
- from three to 15 semester hours of art electives, either studio or art education, outside the two chosen focus areas
- six semester hours of an approved final project, resulting in a graduate exhibition and written documentation

Students should refer to the M.I.S. Interdisciplinary Arts Web site for a detailed description of program requirements, including focus areas and elective options, final project information, continuous enrollment requirements, and the Master of Interdisciplinary Studies in Interdisciplinary Arts guidelines booklet http://www.vcu.edu/ocp/programs/gradart/mis_art.html.
Mathematics and Science Leadership/K-8 mathematics specialist track

The Mathematics and Science Leadership/K-8 mathematics specialist track in the Master of Interdisciplinary Studies program is designed for in-service teachers of mathematics for kindergarten through eighth grades. In designing their individual programs, students, in conjunction with their advisers, may select courses offered by VCU mathematics, science and education departments and courses offered by other collaborating Virginia colleges and universities. The Graduate School, the College of Humanities and Sciences, the School of Education and the departments of Mathematics and Applied Mathematics and Teacher Education administer the program.

Admission requirements

In addition to the general VCU Graduate School requirements for admission and the overall requirements for admission to the M.I.S program, applicants to the Mathematics and Science Leadership/K-8 mathematics specialist track must:

- submit satisfactory scores on either the GRE or MAT from a current test (fewer than five years old). Provisional admission may be granted pending fulfillment of this requirement.
- provide three letters of recommendation, at least one of which must be submitted from an immediate supervisor or principal and at least one of which must address the applicant’s potential for leadership.
- provide evidence in the written statement of intent of at least three years of experience in teaching mathematics and/or science for kindergarten through eighth grades.

Upon review of the application and all supporting documentation, the program coordinator will contact the applicant to schedule an interview to develop the program of study, detailing the courses to be taken as a part of their program and the institutions offering the courses.

Program description

Candidates must complete all of the general program requirements of the M.I.S. program. In addition:

- both of the discipline focus areas are required to be in mathematics, one of the sciences or mathematics/science education.
- at least 18 of the 39 credits, including the final project, must be granted by VCU. Up to six transfer credits may be approved, and the remainder of the credits must be from consortium partners as approved by the student’s adviser, the VCU Graduate School, and
the Mathematics and Science Leadership Advisory Committee.

- The final project must be supervised by a VCU graduate faculty member, may be in mathematics, science or education, and must include an indication of the relationship of the subject of the project to teaching at the kindergarten-through-eighth-grade level.
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.
The purpose of the Ph.D. in Public Policy and Administration program is to prepare students for scholarly and leadership roles in government, universities, research organizations and other settings where knowledge and research skills in public policy and administration are needed. The doctoral program is committed to accomplishing this mission by creating an intellectually vibrant atmosphere for scholarship involving an active faculty from a broad spectrum of academic disciplines and substantial interaction with government agencies and community groups.

The Ph.D. in Public Policy and Administration is a degree program of the university’s Center for Public Policy. The center was established to serve as the focus of the university’s interdisciplinary efforts in teaching, research and service related to public policy. The center, as well as the doctoral program, is designed to involve faculty and academic units from across the university.

Faculty

Faculty for the doctoral program are drawn from graduate faculty across the university. A list of participating faculty and academic units is available from the program office.

Requirements for admission

Admission is open to qualified persons without regard to age, physical disability, national origin, race, religion or gender. Admission is competitive since it is limited by the number of places available. The admission process is intended to assure a reasonable fit between the student’s professional and research interests and faculty expertise. Consequently, otherwise qualified applicants may be denied admission.

Applicants to the program must hold a master’s degree or a recognized post-baccalaureate degree in one of the professions such as law or medicine from an accredited institution of higher education. A standardized test score, fewer than five years old, is required. Accepted examinations include the Graduate Record Examination (GRE), the Graduate Management Admissions Test (GMAT) and the Law School Admissions Test (LSAT). Professional experience is not required, but is considered desirable.

In order to apply for admission to the Ph.D. in Public Policy and Administration program, prospective students must submit:

- a VCU Application for Graduate Study,
- transcripts from all previous colleges or universities,
scores from a standardized examination (GRE, GMAT or LSAT),
three letters of reference,
a personal statement describing reasons for applying to the program and
a current professional resume.

International applicants must submit the International Application and TOEFL scores.
All students admitted to the program must have completed prior to admission, or are required to complete during their first year, the following graduate-level courses (or their equivalent):

- research methods (equivalent of PADM 623),
- statistics (equivalent of PADM 624) and
- public policy, economics or administration/management.

The primary admissions deadline is March 15 for enrollment to begin the following fall semester. However, for those students wishing to be considered for a limited number of fellowships, materials must be received no later than Jan. 15. A small number of special admissions may be made in the fall (Oct. 15 application deadline) for entry the following spring semester. Applicants who wish to be considered for the Oct. 15 deadline must include a letter requesting and justifying early admission. If the request for early consideration is not accepted, the application will be held over to the March 15 application date.

While university rules allow up to six credit hours of course work to be taken as a special student prior to formal admission, taking such courses in no way guarantees admission to the program. Graduate courses designated “doctoral students only” may not be taken prior to formal admission, although they may be taken by fully admitted doctoral students in other programs.

Application packets may be obtained from the program office or the Graduate School.
International applicant materials are available from the International Admissions Office.

Requirements for the Ph.D.

The doctoral program is structured around a core curriculum and several areas of concentration. The curriculum is designed to provide a sound intellectual foundation for the pursuit of theoretical and applied research in administrative and policy studies. The program includes courses in public policy and administration, research methods, public policy economics, political and organizational process, and law and public policy.

In addition to the core, the program offers three concentration areas including health policy, public management in state and local government and nonprofits, and urban policy.

These concentrations offer students the opportunity to build a tailored program of study within a broad area of scholarship. The range of core and affiliate faculty expertise, from both campuses at VCU, gives doctoral students considerable flexibility in designing their studies and research.

Students take a minimum of 36 credits, or 12 courses, in addition to any prerequisites that might be necessary. Seven of these courses are part of the core and five are concentration courses.
Required courses generally will be available on an evening or weekend schedule.

Course work in the Ph.D. program has a strong orientation toward research, both applied and theoretical. Where appropriate, course work may be linked to funded university projects or to external agency-based analytical work. Courses emphasize research, writing and presentation skills.

Core curriculum

PPAD 711 Seminar in Public Policy and Administration I
PPAD 712 Seminar in Public Policy and Administration II
PPAD 791 Law and Public Policy
PPAD 715 U.S. Political Processes and Institutions
PPAD 716 Public Policy Economics
PPAD 721 Survey of Applied Research Methods in Public Policy and Administration
PPAD 722 Survey of Data Analysis Techniques for Public Policy and Administration

Concentrations

In addition to the core, all students will take five courses in their selected area of concentration. Each concentration features a required seminar as one of these courses.

- Health policy: PPAD 730 Seminar in Health Policy
- Public management in state and local government: PPAD 740 Seminar in Public Management
- Urban policy: PPAD 750 Seminar in Urban Policy

The remaining four courses will be selected from a list designated by the concentration committee for each area. At least one of these must be a methodologically oriented course relevant to the student’s area. The concentration committee will approve the program of study for each student in the concentration.

Qualifying examinations

After completing all of the core courses in the Ph.D. program, each student takes a comprehensive qualifying examination on the core. The examination is designed to evaluate the mastery students have achieved over the body of knowledge represented by the core. It is intended to measure the ability of students to organize, integrate and creatively apply the knowledge in the field to important problems. Although organized around the courses in the core, the examination is not restricted to material covered in those courses. It is expected that doctoral students will read well beyond the confines of individual courses.

In order to continue in the program, students must attempt the qualifying examination no later than the next regular semester following their completion of the core course requirements, and they must pass the exam by the end of the second regular semester after completing the core course requirements. A student may attempt the examination twice. Examinations are offered twice per year.
A student also must take a comprehensive examination in the concentration. Each student, under the direction of the adviser, will prepare a reading list on the concentration or on a significant portion thereof. The student will then take an oral examination with his or her adviser based upon the reading list. A student may attempt the examination twice. Exams are scheduled at the convenience of the student and the adviser. Each student must pass this second examination before defending a dissertation proposal.

**Dissertation**

After completing the qualifying examination and course work for the concentration, students must prepare a dissertation involving original research that contributes to the body of knowledge in the field. A committee approved by the director of the program supervises the dissertation work. The chair of the committee must be a core or affiliate faculty member of the Ph.D. program.

The first formal step in the dissertation process is the development and defense of a dissertation prospectus that frames the problem to be studied, provides background on the problem, presents a review of relevant literature and justifies the methodology to be used. The defense of the prospectus as well as the completed dissertation must be done orally to the dissertation committee. The dissertation defense is conducted in a forum open to other students and to faculty.

**Continuous enrollment requirements and expectations**

To remain in good standing, students must maintain continuous registration for each fall and spring semester (except for official leaves of absence) until they have completed all requirements, including the dissertation. Students are required to enroll for a minimum of nine semester hours each calendar year. Once a student has completed all course requirements and passed the comprehensive examinations, he/she may maintain continuous enrollment of three credits of dissertation research per year. A minimum GPA of 3.0 on a 4.0 scale must be maintained. VCU currently requires registration for a defined credit hour level during both the didactic and research phases of advanced degree training. There is no obligatory linkage between the accumulation of credit hours and an expectation that a degree be awarded. As a guide to monitoring the timely completion of the degree within the present enrollment framework, the accumulation of 180 credits for a doctor of philosophy degree can be taken as a reasonable measure. Compliance with other relevant university regulations also is required. While the university provides an array of computing facilities, most students find it desirable to have personal access to computing capacity, including Internet connection. The primary mode of communication between the program office and students is through the Internet and e-mail. Several classes use computer-based interactive technology such as newsgroups.
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.

**Graduate programs**

- Master of Environmental Studies (non-thesis option)
- Master of Science in Environmental Studies *(thesis option)*
- Accelerated Bachelor's to Master's in Bioinformatics
- Master of Bioinformatics
- Ph.D. in Integrative Life Sciences

**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 the administrative offices, the two research centers described below, state-of-the-art laboratories and classrooms, and a climate controlled greenhouse.

VCU Life Sciences supports two university centers of excellence for its research efforts: the Center for Environmental Studies and the Center for the Study of Biological Complexity.
Master of Environmental Studies and Master of Science in Environmental Studies

The goal of the Master of Science in Environmental Studies is to provide a unique, interdisciplinary master’s degree program in environmental studies that emphasizes the critical links between environmental life sciences and public policy. This goal necessitates training that crosses disciplinary boundaries. Through a program of study combining environmental science, environmental policy and emerging technologies, the successful graduate will gain a range of skills designed to facilitate a science-based understanding of the complex interactions between human activities and the natural world. The Center for Environmental Studies offers two graduate-degree options: a Master of Science (research option) requiring a thesis and a Master of Environmental Studies (non-thesis) that replaces the thesis with a directed research experience and a comprehensive exam. Refer to the center’s Web site for more detailed program information.

Admission requirements

Applicants should have successfully completed undergraduate training and hold a bachelor’s degree. Admissions to the program are generally drawn from applicants with an undergraduate GPA above 3.0 (on a 4.0 scale or equivalent) and satisfactory scores on a current standardized graduate admissions test (i.e., GRE, minimum 1500, minimum 500 each for verbal, quantitative and analytical). Applicants holding an undergraduate degree from recognized foreign institutions should display an acceptable level of English proficiency by achieving a score of 600 or above on the TOEFL examination. Application forms and other university materials can be obtained from the Graduate School, Virginia Commonwealth University, P.O. Box 843051, Richmond, VA 23284-3051, or at http://www.vcu.edu/graduate.

Degree requirements

In addition to general VCU graduation requirements, students must:

- Complete a minimum of 33 graduate semester credits, approved by the program director, with an overall GPA of 3.0 or above. At least 15 semester credits must be at the 600 level.
- Complete three required core courses (9 credits), successfully defend a research thesis (6 credits) and complete an additional 18 credits of approved graduate electives.

Core requirements (3 courses/9 credits)
ENVS 601 Environmental Studies Survey
ENVS 603 Environmental Research Methods
STAT 543 Statistical Methods I (or equivalent)

**Thesis** (maximum of 6 credits; Research Option only)
ENVS 697/698 Research and Thesis

**Electives** (6 courses or 18 credits for M.S.; 7 courses or 21 credits for M.Envs.; courses must represent at least two of the disciplines below)

**Environmental studies**
- ENVS 550 Ecological Risk Assessment
- ENVS/ANTH 556 Historical and Cultural Landscapes
- ENVS 590 Environmental Studies Seminar
- ENVS 692 Independent Study
- ENVS 693 Internship in Environmental Studies

**Environmental policy and administration**
- ENVS/PADM 628 Environmental Policy and Administration
- ENVS 660 Virginia Environmental Law and Regulation
- ENVS 691 Business and the Environment
- PADM 601 Principles of Public Administration
- PADM/ENVS 691 River Policy and Management
- URSP 650 Environmental Planning
- URSP 652 Environmental Analysis

**Environmental science/health**
- BIOL 501 Community Ecology
- BIOL 510 Conservation Biology
- BIOL 514 Stream Ecology
- BIOL/ENVS 532 Water Pollution Biology
- BIOL 591 Applied and Environmental Microbiology
- ENVS 650 Pesticides, Health and the Environment
- ENVS 655 Environmental Hydrology
- ENVS 670 Pollution Physiology
- ENVS 691 Topics in Environmental Studies: Environmental Chemistry
- ENVS 691 Topics in Environmental Studies: Environmental Toxicology
- PMCH/ENVS 610 Environmental and Occupational Epidemiology

**Environmental technology**
- URSP/ENVS 521 Introduction to GIS
- ENVS 602 Environmental Technology
- ENVS/URSP 654 Environmental Remote Sensing
- URSP/ENVS 691 Environmental Applications of GIS
- ENVS 691 EcoInformatics

Other electives may be allowed with prior permission of major adviser and program director.
Students may not apply more than three credits (total) of ENVS 692 and/or ENVS 693 to the
degree without prior approval of the major adviser and program director.

**Master of Environmental Studies (non-thesis option)**

Students pursuing the M.Envs. must complete, in addition to all other degree requirements, the following requirements in lieu of the 6-credit thesis requirement: three credits of ENVS 692 (Independent Study) or ENVS 693 (Internship) and three credits of approved electives, for a total of 33 graduate semester credits. In addition, the student must pass an oral comprehensive examination.
Accelerated Bachelor’s to Master’s in Bioinformatics

The Accelerated Bachelor’s to Master’s in Bioinformatics program 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

The accelerated program is restricted to students with demonstrated strong academic ability, personal qualities that exemplify dedication and professionalism, and a clear interest in a career in industry, academia or the government. 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 at least 50 credits of collateral and core course work within the major with a GPA in that work of at least 3.3. An application must be submitted to the Graduate School that includes:

- two form-based recommendations from VCU faculty,
- a personal statement and
- scores from the GRE General Test.

Applicants should indicate which master’s degree program (Master of Science in Bioinformatics or Master of Bioinformatics; see below) is of interest to them. Applications will be screened by the Bioinformatics Admissions Committee, which consists of one member from each of the major tracks and the bioinformatics program coordinator. 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. Receipt of a "C" or lower in two graduate courses constitutes automatic dismissal from the accelerated program.

**Guaranteed admission**

The bioinformatics master’s program participates in the Guaranteed Admission Program. This program allows highly qualified high school seniors who will be participating in the VCU Honors Program 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 1270, in a single sitting, on the SATI, with neither score below 530, and have achieved a minimum 3.0 unweighted GPA (4.0 scale). Once accepted into the Guaranteed Admission Program, bioinformatics students must fulfill the requirements of the Honors Program for graduation with University Honors, maintain a cumulative GPA of 3.50, progress satisfactorily in honors courses and meet course requirements of the bioinformatics graduate program in order to remain exempt from competing for admission into the master’s program. Guaranteed admission applicants will be screened by the Bioinformatics Admissions Committee.

**Transfer credit**

Graduate-level course work completed prior to matriculation into the program, including course work taken in another program at VCU or at another institution, shall be evaluated to determine whether it can be used to fulfill degree requirements of this program. There is no limit to the number of credits that can be transferred from another program at VCU as long as they have not been previously applied toward another degree. A maximum of six credit hours earned at an institution other than VCU can be accepted for transfer into the program if not previously applied toward another degree. A minimum grade of "B" is required for transfer of credits.

**Shared credits for accelerated program**

1. *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* 3
2. Course work taken to meet master’s cross-track requirements replaces undergraduate program electives. 6
3. A graduate course within the track replaces a BS-track required (if approved by adviser) or elective course. 3

Total shared credits 12

* For accelerated program students, BNFO 620 or BNFO 508 replaces BNFO 420 to meet the “oral communication” general education requirement.

**Grade requirements**

Degree candidates must maintain a GPA of 3.0 or greater. Receiving a grade of "C" or lower in two courses constitutes automatic dismissal from the program. The GPAs shall be based on all graduate courses attempted after acceptance into the program. The Bioinformatics Program
Committee will review student progress in December and June of each year to assess continuation in the program.
VCU Life Sciences

Master of Bioinformatics and Master of Science in Bioinformatics

Admission requirements

The purpose of the admission requirements for the graduate program in bioinformatics is to identify and select outstanding candidates whose motivation, background, potential and character have prepared them for the rigors of study required in the program. The Bioinformatics Admissions Committee will screen applications. The following requirements and procedures incorporate and fully comply with those of the VCU Graduate School.

- An undergraduate or previous graduate record indicating superior capabilities. Applicants must have a minimum GPA of 3.0 on a 4.0 scale for the last 60 credits of undergraduate work or for a completed graduate degree. This requirement may be waived by approval of the dean of the Graduate School.

- Satisfactory scores on the Graduate Record Examination (GRE). The verbal, quantitative and analytical writing sections of the GRE are required. Scores for appropriate advanced tests, in particular biology, chemistry or mathematics, are recommended.

- For an applicant whose native language is not English, satisfactory scores from a standardized test commonly used and deemed appropriate for evaluation of English language, such as the TOEFL.

- Letters of recommendation from at least three present or former instructors or other individuals qualified to evaluate the applicant’s abilities to engage in graduate studies in bioinformatics.

- A written statement describing the applicant’s interests, motivation, education and goals for pursuing graduate study in bioinformatics.

- Applicants must indicate which master’s degree (M.S. or M.Biof.) they intend to seek.

Prerequisites and bridge curricula for master’s programs

While an ideal preparation for the bioinformatics master’s programs would include substantial work in molecular biology, computer science, mathematics and statistics, the program has been designed to provide “bridge curricula” to accommodate academically strong students with majors in any one of these disciplines. These students would develop with the assistance of the director of graduate studies a “bridge curriculum” of largely undergraduate courses to meet the prerequisites for the program and prepare them for graduate-level work that emphasizes their chosen track but includes course work in the other two tracks.
Program prerequisites are listed below. In general, students will not need to address the set corresponding to their undergraduate major, but will usually need to address the other two sets. It is expected that all bridge course work will be completed during the first year.

1. Biological/genomic prerequisites: An introductory knowledge of biochemistry and molecular biology, met by taking General Chemistry I-II (e.g. CHEM 101-102), one semester of Organic Chemistry (e.g. CHEM 301), Cell Biology (e.g. BIOL 218), and Essentials of Molecular Biology in Bioinformatics (2 credit module: BNFO 507).

2. Computational science prerequisites: An introductory knowledge of discrete mathematics (e.g. MATH 211); an introductory knowledge of computer science including at least one general computer programming language, met by taking Structured Programming (e.g. CMSC 255) and Data Structures & Advanced Programming (e.g. CMSC 256). If needed, students will be advised to acquire additional prerequisite background by taking one credit of independent study in CMSC 697 (Directed Research).

3. Quantitative/statistical prerequisites: An introductory knowledge of math/statistics, met by taking Calculus with Analytic Geometry I (e.g. MATH 200), Foundations of Statistics (e.g. STAT 212), and Essentials of Statistics in Bioinformatics (two credit module; BNFO 505).

**Advising**

All new students entering the program will be able to discuss their options with the Bioinformatics Program Coordinator and shall be assigned a temporary adviser, who is a faculty member of the CSBC, to assist the students with initial course selection and to provide advice concerning the program. All students in the Bioinformatics Program — M.S. and M.Biof. — will select a primary adviser prior to beginning course work of the second semester in the program.

A Graduate Advisory Committee, headed by the primary adviser, shall direct students enrolled in the program in their research and course work selections. The GAC shall consist of four members, all of whom must be members of the VCU graduate faculty. Individuals who are not already graduate faculty members, e.g. from another institution or industry, must apply to the dean of the Graduate School for temporary membership. The composition of the GAC shall be such that the significant areas for the student's research focus are represented. At least one member of the committee shall be from departments other than that of the primary adviser, to provide a diversity of perspective on the committee. Students and their research advisers should form their committees no later than the end of their second semester of study. Final approval of the GAC membership shall be by the Bioinformatics Program Committee and the director of the Bioinformatics Program.

**Curriculum**

<table>
<thead>
<tr>
<th>Core courses*</th>
<th>14(M.Biof.) – 20(M.S.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track course work credits</td>
<td>12</td>
</tr>
<tr>
<td>Cross-track course work credits</td>
<td>9</td>
</tr>
<tr>
<td>Total graduate program credits</td>
<td>35(M.Biof.) – 41(M.S.)</td>
</tr>
</tbody>
</table>

* Bioinformatics core for M.S. and M.Biof. Degrees M.Biof. M.S.
  - MICR 510 Scientific Integrity 1 1
  - BNFO 601 Integrated Bioinformatics 3 3
  - BNFO 690 Seminars in Bioinformatics 1 1
Tracks

The M.Biof. and M.S. programs share three tracks, each composed of 21 credits including (1) six credits from a track-specific List A, (2) six additional credits from either List A or List B and (3) nine credits of "Cross-Track" course work (i.e. from Lists A or B from the other two tracks), including at least one course from each of the two tracks. In selecting their courses, students must keep in mind the Graduate School requirement that at least 50 percent of the courses taken to meet program requirements must be in courses restricted to graduate students.

Additional electives may be substituted in consultation with the graduate committee. If equivalent graduate courses to those listed have already been taken outside of this master’s program, the policies of the VCU Graduate School would determine the extent to which such course work could be counted toward the bioinformatics master’s degree. For VCU students in the accelerated program, only the 12 specified “shared credits” count toward both degrees.

Master of Bioinformatics

Students enrolled in the M.Biof. program will complete a 10- to 12-week full-time externship at an industrial, government or academic site during the summer between their first and second years in the bioinformatics program. In preparation for this externship, students will enroll in BNFO 620 Bioinformatics Practicum, in the spring semester preceding their externship. Under the supervision of their primary adviser and Graduate Advisory Committee, the external supervisor, and the coordinator of the Bioinformatics Practicum course, each student must develop and write a short proposal outlining the plans for the externship. The project must be approved by the student’s GAC, based on a short (10-page) paper submitted by the student. This paper will include background on the project including a review of the literature, the purpose, specific aims and rationale of the project, a statement about the specific hypothesis to be investigated, and proposed methods and statistical analyses.

Research projects will be based on ongoing research in the laboratories of the participating external adviser. Students in the program may perform research on the broad range of subjects, from molecules to ecosystems, encompassing the field of bioinformatics.

In the fall semester following the externship experience, M.Biof. students shall prepare a written paper describing the completed research performed during their externship following the format of the Graduate School for M.S. theses. An oral defense, consisting of a public presentation of the paper and a committee meeting to discuss the results, under the direction of the GAC but open to all faculty members and the adviser of the externship, shall be scheduled to examine the student’s underlying fundamental knowledge of the disciplines encompassed by the student’s research. Announcement of the oral defense, including the candidate’s name, thesis title, and the day, place and time of the defense, shall be made at least 10 working days in advance of the
Master of Science in Bioinformatics

Thesis research

Students in the M.S. program must perform a credible original investigation under the supervision of their primary adviser and Graduate Advisory Committee. Each student must develop and write a short proposal in consultation with his or her research adviser and GAC. The project must be approved by the student’s GAC, based on a short (10-page) paper submitted by the student. This paper will include background on the project including a review of the literature, the purpose, specific aims and rationale of the project, a statement about the specific hypothesis to be investigated, and proposed methods and statistical analyses.

Research projects will be based on ongoing research in the laboratories of faculty in the CSBC and across both campuses of VCU and the Virginia BioTechnology Research Park. Students in the program may perform research on the broad range of subjects, from molecules to ecosystems, studied by CSBC faculty.

Students shall prepare a written thesis describing the completed research performed during their tenure in the M.S. in Bioinformatics program following the format of the Graduate School. An oral defense, consisting of a public presentation of the thesis and a committee meeting to discuss the thesis, under the direction of the GAC but open to all faculty members, shall be scheduled to examine the student's research, thesis and underlying fundamental knowledge of the discipline's encompassed by the student's research. Announcement of the oral defense, including the candidate's name, thesis title, and the day, place and time of the defense, shall be made at least 10 working days in advance of the defense.
Ph.D. in Integrative Life Sciences

The Ph.D. in Integrative Life Sciences is designed for students who want to conduct research that is integrative across multiple disciplines and that takes a systems approach to emerging research questions across the many fields that comprise the life sciences. Students may opt to work with faculty members from departments on both campuses. The program provides the opportunity to conduct interdisciplinary research at multiple scales of study from the molecular to ecosystem levels with an emphasis on the concepts of systems biology and biological complexity.

Admission requirements, procedures and financial aid

The purpose of the admission requirements for the Ph.D. program is to ensure selection of outstanding students whose motivation, ability and education prepare them for interdisciplinary graduate study in the life sciences. The following requirements and procedures incorporate those of the VCU Graduate School.

1. Admission requirements
   a. Graduation from an accredited college or university or its equivalent, with a degree in a discipline, a spectrum of course work, and/or professional experience that provides an appropriate background for graduate-level study in the life sciences.
   b. An undergraduate or graduate record indicating superior performance. Applicants must have a minimum GPA of 3.0 on a 4.0 scale for at least the last 60 credits of undergraduate work or for a completed graduate degree. In very unusual cases, this requirement may be waived by approval of the dean of the Graduate School.
   c. Satisfactory scores on the Graduate Record Examination. Scores for appropriate advanced tests, in particular biology, chemistry or molecular biology/biochemistry, are recommended.
   d. For applicants whose native language is not English, satisfactory scores from a standardized test commonly used and deemed appropriate for evaluation of English language proficiency, such as the TOEFL.
   e. Letters of recommendation from three present or former instructors or other individuals qualified to evaluate the applicant’s ability to engage in graduate study in the life sciences.
   f. A written statement describing the applicant’s interests, motivation, education and goals for pursuing graduate study in the life sciences.

2. Admission procedure
   a. The above material must be sent along with a completed application form and the required application fee to the Graduate School, Virginia Commonwealth University...
b. Applicants may apply for admission to begin studies any semester of the year, but fall admission is recommended. Admission to graduate study in integrative life sciences requires majority approval and recommendation by the Graduate Program Committee and acceptance by the vice provost for Life Sciences and the dean of the Graduate School.

3. Types of admission
   a. Degree-seeking student: An applicant who meets all requirements for admission to the program.
   b. Provisional student: An applicant who has not fully met the requirements of the program but shows exceptional promise. Applicants with outstanding potential but who lack courses or training in specific areas deemed necessary for success in the program may be required to complete specific course work. Provisionally accepted students must remove all conditions of the provisional admission within one year of enrollment. Failure to meet these conditions will result in the student being dismissed from the program. No prerequisite courses taken as a provisional student may be applied toward the graduate degree.

4. Financial aid. In addition to need-based financial aid awarded through the Office of Financial Aid, students may be eligible to be considered for a variety of scholarships, fellowships, and teaching and research assistantships. Information regarding available financial support will accompany an offer of acceptance.

**Degree requirements**

Students are required to complete course work in core and elective courses and to conduct significant research. All work toward the degree must be completed within seven years of the first enrollment.

1. Credit requirements. Students in the program are required to earn a minimum of 64 hours of graduate-level credits, of which 24 credits are from didactic courses and the remaining 40 credits may be in dissertation research. At least one-half of the credit hours presented for graduation must be at the 600 level or higher.

2. Grade requirement. Degree applicants must achieve an overall GPA of 3.0 (“B”) with a grade of “C” in no more than two courses. The GPA for graduation is based on all graduate courses attempted after acceptance into the program.

3. Transfer and M.S. credits. Graduate-level course work taken in another program at VCU or at another institution, shall be evaluated to determine whether it can be used to fulfill degree requirements of this program. There is no limit to the number of credits that can be transferred from another program at VCU as long as they have not been previously applied toward another degree. A maximum of six credits earned at another institution can be accepted for transfer into the program if not previously applied toward another degree. A minimum grade of “B” is required for credits transferred.

4. Research adviser and committee. New students entering the program may be initially advised by an advisory committee of faculty members to assist students with initial course selection and to provide advice concerning the program. Students should select a research adviser prior to their third semester of study. The research adviser may be chosen from among the many graduate faculty members associated with this program from either campus.

Students are required to form a research advisory committee that is headed by the research adviser and consists of a minimum of five members of the VCU graduate faculty. Individuals who are not graduate faculty members (i.e. individuals from another
institution or industry) must apply to the dean of the Graduate School for temporary membership. The significant areas of the student’s research focus should be represented by the members of the research advisory committee. At least two members of the committee shall be from departments other than that of the research adviser, with one of those members being integrally associated with the student’s research to foster the interdisciplinary intent of this degree program. Students should form their committee no later than the end of their third semester of study.

5. Written and oral examinations. Before admission to candidacy for the Ph.D. degree, students must successfully complete a comprehensive written examination and an oral examination. The student’s research advisory committee will administer both exams. Students should take the written exam upon completion of all required didactic course work. It will focus on material covered in core and selected elective courses as well as fundamental knowledge relevant to the student’s research field. Upon successful completion of the written examination and submission and acceptance of a research proposal, students should take an oral examination that includes a defense of the proposed research project and other subject areas deemed appropriate by the committee. Students may retake the written and oral examinations only once.

6. Dissertation research. The dissertation research project should represent a significant contribution to the body of knowledge in its field and should be deemed suitable for publication in refereed journals. The emphasis of the research conducted by students in this program should be on interdisciplinary research, incorporating two or more disciplines and with a systems approach. Research projects may take advantage of the many research opportunities across the life sciences on both campuses. Projects may encompass multiple scales of study from molecular to ecosystem levels. Students shall prepare a written dissertation describing the completed research using the format approved by the Graduate School. An oral defense of the dissertation, under the direction of the research advisory committee and open to all faculty members, also is required. Upon successful completion of all degree requirements, students will graduate with the Ph. D. in Integrative Life Sciences.

Curriculum requirements

A minimum total of 64 credits is required and is distributed as follows:

- 12 credits in core courses
  - LFSC 510 Biological Complexity
  - LFSC 520 Bioinformatics Technologies
  - LFSC 630 Integrative Life Sciences Research
  - LFSC 690 Research Seminar in Integrative Life Sciences
  - MICR 510 Scientific Integrity

- a minimum of three credits in an advanced statistics, advanced mathematics or experimental design course depending on the student’s area of research*
  - BNFO 591 Introduction to Bioinformatics
  - BIOL 606 Quantitative Ecology
  - BIOS/STAT 523 Nonparametric Statistics
  - BIOS 524 Biostatistical Computing
  - BIOS 572 Statistical Analysis of Biomedical Data
  - ENVS 603 Environmental Research Methods
  - LFSC 610 Analytical Methods in Biocomplexity Analysis
  - MATH 591 Mathematical Biology
  - MATH 617 Applied Mathematics I
  - STAT 533 Applied Linear Regression
  - STAT/BIOS 544 Statistical Methods II
  - STAT 623 Discrete Multivariate Analysis

Other courses based on approval of research advisory committee
- a minimum of nine credits in elective courses based on research interest and approved by research advisory committee
- a minimum of 40 credits in directed research (LFSC 697)

* Students are expected to enter the program with a proficiency in statistics at the introductory level, as exemplified by STAT/BIOS 543 Statistical Methods. Students not at this level, as evidenced by prior course work, will be required to take STAT/BIOS 543 or an equivalent course.
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.

**Graduate programs**

The College of Humanities and Sciences offers the following graduate degree programs:

- M.A. in English
- M.A. in History
- M.F.A. in Creative Writing
- M.P.A. in Public Administration
- M.S. in Biology
- M.S. and Ph.D. in Chemistry
- M.S. in Criminal Justice
- M.S. in Forensic Science
- M.S. in Mass Communications
  - advertising
  - scholastic journalism
- M.S. in Mathematical Sciences
  - applied mathematics
  - mathematics
  - operations research
  - statistics
- M.S. in Physics
- M.S. and Ph.D. in Psychology
  - clinical
  - counseling
  - general
- M.S. in Sociology
- M.U.R.P. in Urban and Regional Planning

**Post-baccalaureate certificates**

- Applied Social Research
- Criminal Justice
- Nonprofit Management
- Planning Information Systems
- Public Management (Graduate)
- Statistics (Undergraduate)
- Urban Revitalization
In addition to these degree programs, the College of Humanities and Sciences offers selected
graduate courses in the departments of Foreign Languages, Philosophy and Religious Studies,
but does not offer graduate degree programs in these departments.

Admission requirements

In addition to the general requirements for admission to graduate studies as stated in the
Graduate Studies at VCU chapter of this bulletin, persons seeking admission to any of the
graduate programs in humanities and sciences should:

- have a bachelor's degree in the discipline in which application for graduate study is made
  or, in some programs as noted, a bachelor's degree in some other appropriate area,
- submit Graduate Record Examination (GRE) scores (some departments require the scores
  on the advanced GRE within the discipline; some departments accept LSAT and MAT
  scores in lieu of GREs) and,
- have submitted letters of recommendation that comment on the applicant's ability to
  undertake graduate study in the specified area.

All applications will be considered in terms of the specific requirements for admission noted in
the description of the individual programs and of the applicant's ability to perform satisfactorily
in the program for which he/she has applied. The judgment of that ability will be based on the
supporting material submitted with the application. Some graduate programs must limit
enrollment to a fixed number of the best-qualified applicants. Final action on admission is taken
by the dean of the Graduate School in consultation with the College of Humanities and Sciences
and the department concerned.

Applicants whose applications reach the university after July 1 for the fall semester and after
Nov. 15 for the spring semester may not have their applications processed in time for
registration. The applicant whose application arrives late may be considered for admission as a
special student, but there is no guarantee that the special student later will be accepted into a
degree program. Refer to the programs section of the Graduate School Web site for specific
deadlines for all graduate programs.

Registration

Although most students register for the first semester, which begins in August, they may arrange
to begin graduate work during the spring semester with the exception of the program in clinical
and counseling psychology.

Scholarships, assistantships, fellowships and other
financial assistance for graduate students*

The College of Humanities and Sciences seeks to attract and support graduate students of the
highest caliber and to prepare them, through research and instruction, to meet local and national
needs for highly trained men and women. Recognizing that financial limitations may inhibit some
qualified students from applying, the college attempts to inform students of the options of
various loans, grants and work-study opportunities that are available to them as well as assist
them in financing their education by offering various forms of financial aid and facilitating the process of seeking financial assistance from external sources. Additionally, the college believes that the experience of being a teaching or research assistant reinforces the learning that takes place in the classroom. The value of teaching assistants also is recognized as being beneficial to the college’s undergraduate programs.

Types of financial aid that are available to graduate students fall into three basic categories: aid that does not have to be repaid (grants, scholarships and tuition waivers), aid that does have to be repaid (loans) and aid that enables students to earn a portion of their school costs (work-study, graduate teaching assistantships and graduate research assistantships).

Offers of financial aid are based on financial need and/or skill and competency. Financial need is determined by information contained in the Federal Application for Student Aid (FAFSA) completed by the student. Not all financial aid is based on financial need. To ascertain your eligibility for the different types of financial aid, contact the VCU Office of Financial Aid at 901 W. Franklin St., P.O. Box 843026, Richmond, VA 23284-3026, (804) 828-6669, and the department to which you will be applying. The university library has reference books listing other types of scholarships and grants. International students should contact: Office of International Education at 916 W. Franklin St., P.O. Box 843043, Richmond, VA 23284-3043, (804) 828-6016.

Graduate teaching assistantships and graduate research assistantships are forms of financial aid that provide teaching and research positions for graduate students within their field of study. These are not loans and do not have to be repaid because the student is actually earning income for services rendered. Usually graduate assistants must work the equivalent of 20 hours per week. Assistantships are awarded to students who have demonstrated academic excellence. Individual departments award the assistantships, which usually include payment of tuition; the teaching and/or research duties of graduate assistants vary among departments. Graduate students interested in seeking these teaching and research positions are advised to contact the departments to which they will apply for admission.

Graduate students applying for financial assistance should remember the following tips:

- apply early
- use federal tax forms to complete the FAFSA
- save copies of all forms completed, including tax returns
- check with the specific department for application requirements and deadlines

**Students should assume they are eligible, not ineligible.**

* Also see departmental listings.

**The student adviser and the graduate committee**

All departments offering graduate degrees in the College of Humanities and Sciences provide graduate students with advising either through a single adviser, the student’s graduate committee or a departmental graduate committee. For details, students should consult the departmental director of graduate studies or the department chair.
Graduate degree requirements

- Full-time graduate status shall consist of a minimum of nine and a maximum of 15 credits per semester. No more than 12 semester credits may be earned in a summer session. See the Graduate Studies at VCU chapter of this bulletin for course load requirements for students awarded graduate assistantships.

- Graduate students are required to maintain an overall GPA of 3.0 (“B”). Students who do not maintain a “B” average during the course of their program may be dropped from the program at any time on recommendation of the appropriate department committee to the dean of the Graduate School. If students earn less than a "B" on 20 percent or more of all attempted credits, their graduate status must be reviewed for continuation by the appropriate department committee.

- At least half of the credits required in the student’s program must be those designated as exclusively for graduate students; that is, those at the 600 level or above.

- Graduate students must have earned an overall GPA of 3.0 (“B”) in order to receive a degree.

In addition to these requirements and those set forth in the Graduate Studies at VCU chapter of this bulletin, students must meet the requirements for specific degrees set forth in the departmental listings. Students also should consult the Continuous Enrollment Policy stated in the Graduate Studies at VCU section of this bulletin.

VCU requires registration for a defined credit-hour level during both the didactic and research phases of advanced degree training. For programs requiring the preparation of a thesis or dissertation, there is no obligatory linkage between the accumulation of credit hours and an expectation that a degree be awarded.

As a guide to monitoring the timely completion of the degree requiring a thesis or dissertation within the present enrollment framework, the accumulation of 80 credit hours for a master’s degree and 180 credit hours for a doctoral degree can be taken to be reasonable credit maxima. Unless stated otherwise, these figures apply only to programs offered by the College of Humanities and Sciences.

Students are required to submit in advance of the date when they expect to receive a degree a Graduation Application Form to the dean of the College of Humanities and Sciences. Deadlines for the submission of the Graduation Application Form are listed in the academic calendars online at http://www.vcu.edu/academiccalendars; for departmental deadlines the student should consult the departmental adviser. Individual departments may require additional forms.

Appeal procedures

Graduate students in the College of Humanities and Sciences have the right to appeal course grades or other academic actions on the grounds of a breach of due process. See the Graduate Studies at VCU section of this bulletin for a summary of the Grade Review Procedure. An appeal of an academic action other than a grade review is governed by the Graduate Student Academic Appeal Procedure. A copy of this document can be obtained from department offices.
L. Douglas Wilder School of Government and Public Affairs

The L. Douglas Wilder School of Government and Public Affairs brings together faculty from multiple disciplines that share a common interest in public affairs. The school’s graduate faculty includes individuals with strong research and analytical skills and with substantive expertise in such fields as criminal justice, economics, political science, public administration, urban planning and community development. The faculty is 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 graduate and professional degree programs for our students.

The School of Government and Public Affairs 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.

Program offerings

The school offers a variety of graduate educational opportunities for both full-time students and for practicing professionals interested in enhancing their skills or pursuing graduate-level work on a part-time basis. Current offerings include three nationally recognized master’s programs and six graduate-level certificates. These programs include:

- Master of Science in Criminal Justice
- Master of Public Administration
- Master of Urban and Regional Planning
- Certificate in Criminal Justice
- Certificate in Historic Preservation Planning
- Certificate in Nonprofit Management
- Certificate in Public Management
- Certificate in Planning Information Systems
- Certificate in Urban Revitalization
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.

Admission

Admission to programs of the L. Douglas Wilder School of Government and Public Affairs is available to qualified students on a rolling admissions basis. Since the demand for admission to some programs is high and space availability is limited, students are encouraged to apply well in advance of their proposed admission dates.

As outlined below, admission requirements vary by academic program. No application packet will be considered by the relevant program admissions committee until all the required materials have been submitted by the applicant.

Application forms and instructions for applying to all graduate programs are available on the Graduate School Web site at http://www.vcu.edu/graduate.

Admission to a master’s program from the certificate programs

The Graduate Certificate in Public Management and the Graduate Certificate in Nonprofit Management are designed for persons in professional positions who require a limited number of courses in contemporary management theory and skills. However, if a student later decides to pursue the M.P.A. degree, successfully completed certificate courses may be applied toward the degree. Successful completion of either certificate does not guarantee admission into the M.P.A. degree program.

The courses in the Post-baccalaureate Certificate in Criminal Justice program are the same as the master’s courses and, with grades of "B" or better and upon acceptance into the master’s degree program, are fully transferable to the Master of Science in Criminal Justice program.

All courses in the Certificate in Urban Revitalization may be applied to meet the requirement of the Master of Urban and Regional Planning degree. However, successful completion of the certificate program does not guarantee admission into the M.U.R.P. degree program.

Provisional admission

- In rare cases, applicants who do not meet the requirements for full admission may be accepted provisionally upon recommendation of the program’s admissions committee. The conditions for earning full admission are stated in the provisional acceptance letter sent by the dean of the Graduate School. Conditions usually include the requirement that the student complete the first nine hours of departmental graduate courses with a grade of "B" or better in each course.

- Provisional admission does not constitute a waiver of the requirement to submit a GRE or other standardized test score.

Continuous enrollment requirements and expectations

To remain in good standing, students must maintain continuous registration for each fall and
spring semester (except for approved leaves of absence) until they have completed all requirements. Students who fail to register for two consecutive semesters (summer sessions included) will be dropped automatically from the program and must reapply for admission in order to continue. Exceptions to this policy will be made on an individual basis by petition. Students who reapply after having been dropped for failure to register continuously will be evaluated under the bulletin requirements in effect at the time of readmittance.

A minimum GPA of 3.0 on a 4.0 scale must be maintained. Compliance with other university regulations also is required.

**Part-time students**

Since the school schedules many of its courses in the late afternoon or evening, its programs accommodate both full- and part-time students. Students also may take advantage of courses offered in the summer. Thus it is possible for a part-time student taking six credit hours per semester to finish the master’s degree in four years or less.

**Nondegree-seeking students**

Nondegree-seeking students must have an undergraduate degree from an accredited institution and the written approval of the instructor prior to registering for any graduate-level course. Nondegree-seeking students can take no more than six credit hours without authorization from the appropriate program coordinator.

**Transfer credit**

With the consent of the admission committee or program coordinator, a maximum of six semester hours of appropriate graduate credit may be transferred and applied toward the Master of Science in Criminal Justice, the Master of Public Administration or the Master of Urban and Regional Planning. These hours will not have been credited toward another degree.

**Financial aid information**

Information and application forms for financial aid may be secured from the VCU Office of Financial Aid, 901 W. Franklin St., Room 107, Richmond, VA 23284-3026, (804) 828-6669.

The L. Douglas Wilder School of Government and Public Affairs also offers a limited amount of financial assistance. Individuals interested in such assistance are urged to apply by March 30. Financial assistance available through the school includes:

- **Graduate teaching assistant positions** – Duties involve helping with the instruction of courses. The level of support varies according to the work level, financial need and scholarship.

- **Research assistant positions** – The stipend and number of positions depend upon the level of sponsored research carried out by the school each year.

- **Tuition fellowships** – There are a limited number of tuition fellowships for full-
time students within the three master's degree programs.

**T. Edward Temple Memorial Scholarship Award** – This award of approximately $500 per year is given to an outstanding graduate student in the Master of Urban and Regional Planning program each year.

**The Senator Edward E. Willey Scholarship, the Virginia City Management Association/University Dr. T. Edward Temple Scholarship and the Leigh E. Grosenick Scholarship** – These scholarships are available to outstanding students in the Master of Public Administration program. Preference for these three scholarships is given to those who plan public careers in Virginia.

**Internships** – Paid, on-the-job internships are widely available in the Richmond area and elsewhere and are encouraged. VCU graduates also have been successful in obtaining presidential management internships in the federal government, state-government professional positions and local government positions.
Master of Science in Criminal Justice

The graduate program in criminal justice is designed to provide advanced educational preparation for students and criminal justice professionals pursuing careers in the field of criminal justice. Such preparation includes understanding the range of theory, research and policy in criminal justice. The curriculum is directed especially toward assisting students in developing the advanced knowledge, skills and abilities required by criminal justice professionals.

The Master of Science in Criminal Justice requires 36 semester hours of course work. Students are expected to complete CRJS 501 as one of their first courses. CRJS 550, 601, 616, 620 and 641 also are required, as are five elective courses (15 credits) approved by the graduate coordinator. Students who do not have criminal justice experience are encouraged to complete an approved internship (CRJS 693). To complete the M.S. curriculum, the student also is required to pass a comprehensive examination, CRJS 684.

Admission requirements

Beyond the general Graduate School standards listed in Graduate Studies at VCU section of this bulletin, admission to the Master of Science in Criminal Justice also will be based on:

- an undergraduate GPA that exceeds 2.7 overall.
- a satisfactory score on the GRE. Call (800) GRE-CALL for exam information.
- previous evidence of ability to perform graduate-level work (where applicable).
- professional experience in criminal justice (where applicable).

Requirements for the degree of Master of Science in Criminal Justice

In addition to general graduation requirements:

- Students must complete a minimum of 36 graduate semester credits, approved by the chair, with an overall GPA of 3.0 or above.
- Students must successfully complete the comprehensive examination. Students have a maximum of three opportunities to pass the comprehensive examination.
- Students may complete a supervised field placement (CRJS 693) under the direction of the department and the immediate supervision of a qualified person in an approved agency or facility. Applications for all internships must be submitted one semester in advance to the program’s internship coordinator.
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJS 501 Criminal Justice Assessment</td>
<td>3</td>
</tr>
<tr>
<td>CRJS 550 Professional Ethics and Liability</td>
<td>3</td>
</tr>
<tr>
<td>CRJS 601 Research Basis of Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CRJS 616 Justice Policies and Administration</td>
<td>3</td>
</tr>
<tr>
<td>CRJS 620/SOC 620 Seminar in Criminology</td>
<td>3</td>
</tr>
<tr>
<td>CRJS 641 Jurisprudence</td>
<td>3</td>
</tr>
<tr>
<td>Comprehensive Exam (required of all students)*</td>
<td>3</td>
</tr>
<tr>
<td>CRJS 684 Comprehensive Exam</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

Note: Students may complete an approved internship (CRJS 693).

*Students must successfully complete the comprehensive examination, with a maximum of three opportunities to pass.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved electives (five courses)</td>
<td>15</td>
</tr>
<tr>
<td>Electives must be approved by the adviser</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>
Master of Public Administration

The Master of Public Administration program is designed to meet the graduate educational needs of pre-service and in-service professionals for careers in public management and analysis in the public and nonprofit sectors. The program is accredited by the National Association of Schools of Public Affairs and Administration.

Admission requirements

In addition to the general requirements, selection is made on the basis of prior academic performance, professional accomplishments and other indicators of the ability to pursue graduate studies and a professional career in public management successfully. Specifically, the application for admission requires a transcript documenting the completion of a bachelor’s degree, three letters of reference (including both academic and professional references if possible), a current resume and a satisfactory standardized test score (GRE, GMAT, MAT, LSAT). Students submitting MAT and LSAT scores must have taken an undergraduate math course (algebra, statistics, finite mathematics) and passed with a “C” or better.

Degree requirements

- A student must complete a minimum of 36 semester hours, as approved, with an overall GPA of 3.0 or above. Students who do not have at least one year of professional-level experience in the public sector or in a nonprofit agency are required to earn three additional hours of credit in a public service practicum (for a total of 39 semester hours of credit for the degree).

- All students who are required to take the practicum will usually do so during the summer between the first and second years or during the last semester of course work. The practicum should last a minimum of 300 hours as required by the National Association of Schools of Public Affairs and Administration. The scheduling of the practicum will be flexible enough to accommodate the needs of those students who pursue the degree on a part-time basis.

  Each practicum will be negotiated between VCU and the host agency, including the scope of work to be performed by the student, the type and extent of supervision both within the agency and from the university, and the stipend. A learning contract will be executed among the department, the agency and the student. A written student project is required to complete the internship.

  All students are required to complete the courses in the core curriculum unless competence in the subject matter can be demonstrated on the basis of previous experience or course work.

Advising

After admission, each student will be assigned an adviser who will assist in planning the specific...
sequence of courses and program of study.

Core curriculum

Required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PADM 601 Principles of Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PADM 602 Public Administration Theory</td>
<td>3</td>
</tr>
<tr>
<td>PADM 607 Public Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>PADM 609 Financial Management in Government</td>
<td>3</td>
</tr>
<tr>
<td>PADM 623 Research Methods for Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PADM 624 Quantitative Methods for Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PADM 625 Public Policy Analysis</td>
<td>3</td>
</tr>
<tr>
<td>PADM 689 Seminar in Public Administration or PADM 690 Reading Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 24 credits

Electives

12 credits

Total: 36 credits

Practicum (if required)

3 credits

Total: 39 credits

Concentration possibilities

Students may develop a concentration in one of several areas from among the elective courses offered by the department or in combination with courses elsewhere in the university. Possibilities include the following concentrations:

- environmental policy
- human resource management
- public financial management
- executive leadership
- public policy analysis and evaluation
- local government management
- nonprofit management

Other concentrations may be developed including concentrations in other fields. These concentrations may require agreement with other degree programs such as criminal justice, economics, gerontology, social work, urban and regional planning, business, and health administration.
College of Humanities and Sciences

Accelerated B.A./M.P.A. Program

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 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 with a major or minor in political science.

Upon being accepted into the accelerated program, a student must meet the same standards of performance as a graduate student, must maintain a 3.0 GPA and must satisfactorily complete all of the requirements for the degree, as stated in this bulletin. Students admitted to the accelerated program receive guidance from the public administration program director and the faculty coordinator of the accelerated program.

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, 12 are required credits (POLI 103 U.S. Government, POLI/INTL 105 International Relations, POLI 107 Political Theory, POLI 109 Comparative Politics). 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 graduate credits may be taken prior to completion of the baccalaureate degree.
Master of Public Administration and Juris Doctor (dual degree)

The dual degree program is designed to provide its graduates with two degrees — Master of Public Administration and Juris Doctor — attesting to competency in both public administration and law. This competency is applicable to areas of practice drawing upon knowledge and skills from each of these fields. The program brings together persons interested in both the broader aspects of public policy and government affairs, and the law. It also brings together two fields that require complementary knowledge and skills, which may be directed toward solving problems that are associated with the affairs of the government and nonprofit sectors. This integration of education in public administration and law draws on the contributions that each discipline can make to a professional knowledge base for practice in both fields.

Students who are accepted into the dual degree program are permitted to apply 12 credit hours of work in the M.P.A. toward meeting the graduation requirements in the T.C. Williams School of Law, and up to 12 credit hours of work in the T.C. Williams School of Law toward meeting the graduation requirements for the M.P.A. This credit application enables participants in the dual degree program to complete the requirements for the J.D. and the M.P.A. in an estimated four years of full-time course work. Applicants for this program are required to meet admission standards of both the T.C. Williams Law School of the University of Richmond and the Graduate School and the M.P.A. program of VCU.
The graduate program in urban and regional planning is accredited by the Planning Accreditation Board and provides professional grounding in the theory and methodologies of planning through a curriculum that balances classroom and field experience.

The M.U.R.P. is a two-year degree program requiring 48 semester hours of class work. Each student must complete an internship with a planning agency or organization. A core of required courses, totaling 30 semester hours, includes:

- Introduction to Planning
- Planning Information Systems
- Foundations for Development Planning
- Demographic Analysis in Planning
- Theories and Problems in Planning
- Legal and Legislative Foundations of Planning
- Planning Studio I
- Planning Studio II or Thesis
- Planning Practicum Seminar

In selecting their elective courses, students may (1) opt for exposure to a wide array of planning-related subject matter (the generalist or comprehensive approach), (2) select one of the areas of specialization defined by the department's faculty (see the list that follows), or (3) develop an individualized program, focusing on one or more self-defined topics. Regardless of the approach selected, students are expected to meet regularly with their faculty advisers for discussion of their courses of study in relation to their career plans.

The following faculty-defined areas of specialization are offered by the department:

- economic development
- environmental planning
- housing and community planning
- planning management
- physical land use planning
- urban revitalization
Admission requirements

Beyond the general Graduate School admissions standards, the following specifications apply:

- Students must have a minimum of a 2.7 GPA (on a 4.0 scale) in their last 60 semester hours of undergraduate work. In addition, a GPA of not less than 3.0 must have been maintained in their undergraduate majors. Finally, applicants are expected to receive satisfactory scores on each of the categories in the GRE or on the LSAT examination.

- Students not meeting these requirements may be admitted to the program on a provisional basis. The provisional period shall consist of the first nine to 12 hours of designated graduate work in which all grades must be no less than "B." Provisional admission does not constitute a waiver of the requirement related to a standardized test.

- Generally, at least two of the three letters of reference should come from former faculty.

Degree requirements

1. Students must complete a minimum of 48 graduate credits plus an internship. A core of required courses accounts for 30 of these credits; the remaining 18 are electives. An overall GPA of at least 3.0 (on a 4.0 scale) is required for receipt of the M.U.R.P. degree.

2. Students within the M.U.R.P. program are required to complete either a thesis (URSP 764) or to prepare a professional quality plan through the Planning Studio II course (URSP 762). Program administrators request permission to utilize the grade of PR, in addition to normal letter grades ("A," "B," "C," "D," "F") in URSP 762 Planning Studio II. This will allow students the ability to work on their plans over a more extended period of time, if necessary.

Internship and placement

The internship is designed to give students practical experience in planning-related activities in an institutional context. Normally, the internship is taken during the summer between the first and second year. Many opportunities for internship positions, as well as part- and full-time jobs in planning at all levels of government, exist within the Richmond area. Upon request, the internship requirement may be waived for students with substantial professional experience.

Curriculum

<table>
<thead>
<tr>
<th>First year, first semester</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>URSP 610 Introduction to Planning</td>
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<tr>
<td>URSP 623 Planning Information Systems</td>
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</tr>
<tr>
<td>URSP 662 Foundations for Development Planning</td>
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</table>

<table>
<thead>
<tr>
<th>First year, second semester</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>URSP 624 Demographic Analysis in Planning</td>
<td>3</td>
</tr>
<tr>
<td>URSP 632 Theories and Problems in Planning</td>
<td>3</td>
</tr>
<tr>
<td>URSP 635 Legal and Legislative Foundations of Planning</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Internship
Normally taken between the first and second year of course work, but other options are available. Internship must be taken prior to, or concurrent with, URSP 794 Planning Practicum Seminar.

**Second year, first semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>URSP 761 Planning Studio I</td>
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</tr>
<tr>
<td>Electives</td>
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</table>

**Second year, second semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>URSP 762 Planning Studio II</td>
<td>6</td>
</tr>
<tr>
<td>URSP 794 Planning Practicum Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

48
Post-baccalaureate Certificate in Criminal Justice

The Post-baccalaureate Certificate in Criminal Justice program offers an abbreviated graduate-level course sequence of 15 credit hours for individuals with an academic and/or professional background in criminal justice.

This certificate program offers specialization for individuals interested or involved in law enforcement, corrections, juvenile justice or the courts. It combines survey and theory courses with research, management and policy courses on the justice system. The courses in the Post-baccalaureate Certificate in Criminal Justice program are the same as the master's courses and, with grades of "B" or better and upon acceptance into the master’s degree program, are fully transferable to the Master of Science program.

Five courses are required for the certificate, as specified in the chart that follows. To receive the certificate the student must achieve a "B" average in the five courses with no more than one "C" grade and complete the 15-hour certificate program within three years.

**Curriculum:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJS 501</td>
<td>Criminal Justice Assessment</td>
<td>3</td>
</tr>
<tr>
<td>CRJS 601</td>
<td>Research Basis of Criminal Justice</td>
<td>3</td>
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<tr>
<td>Select three from the following courses:</td>
<td></td>
<td>9</td>
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<tr>
<td>CRJS 550</td>
<td>Professional Ethics and Liability</td>
<td></td>
</tr>
<tr>
<td>CRJS 616</td>
<td>Justice Policies and Administration</td>
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<tr>
<td>CRJS 620</td>
<td>Seminar in Criminology</td>
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<tr>
<td>SOCY 620</td>
<td></td>
<td></td>
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<tr>
<td>CRJS 641</td>
<td>Jurisprudence</td>
<td></td>
</tr>
<tr>
<td>Graduate elective</td>
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<td></td>
</tr>
</tbody>
</table>

15 credits
Post-baccalaureate Graduate Certificate in Historic Preservation Planning

The certificate in historic preservation planning provides specialized training in the techniques and processes of historic preservation and planning. This graduate-level program includes courses in historic preservation, architectural history, preservation analysis and methods, building reuse, and the role of the public and private sectors in implementing proposals. The program is useful for mid-career professionals in planning, historic preservation, architecture and those in allied fields who wish to learn new skills to expand their career options. It also is useful for recent college graduates who want advanced training in the application of historic preservation in urban development.

Students must meet the following admission requirements:

- completion of an official application form,
- letter of intent describing interest in applying to the certificate in historic preservation planning,
- an official transcript showing successful completion of an appropriate undergraduate degree,
- three letters of recommendation and
- a minimum grade-point average of 3.0 (out of 4.0) in the last 60 hours of undergraduate study.

The certificate consists of nine credits in architectural history and nine credits in urban planning.

**Urban planning:** After discussing the program with an adviser, students should choose three of the following courses:

- URSP 517 Historic Preservation in Planning
- URSP 610 Introduction to Planning
- URSP 611 Principles of Urban Design
- URSP 635 Legal and Legislative Foundations of Planning
- URSP 647 Adaptive Reuse of Buildings

**Architectural history:** After discussing the program with an adviser, students should choose three courses from among the offerings in architectural history at the 500 or 700 level. Examples of courses are:

- ARTH 502 Historic Preservation and Architectural History
- ARTH 789 Palladianism and its Alternatives
- ARTH 789 The World of Jefferson and Letrobe
- ARTH 789 From Neoclassicism to World War I
ARTH 789 The Arts and Crafts Movement
Post-baccalaureate Graduate Certificate in Nonprofit Management

The graduate certificate in nonprofit management is a post-baccalaureate program designed to enable practitioners principally in the nonprofit sector to acquire knowledge and skills in managing nonprofit organizations without pursuing a full master’s degree.

Admission to the certificate program requires the same procedure used in applying to the M.P.A., except that a standardized examination is not required.

The certificate requires a total of 15 graduate credit hours that is comprised of four courses in the graduate public administration program and one elective that may be public administration, or from elsewhere within the school or university. The following courses are required:

- PADM 650 Principles of Nonprofit Management
- PADM 656 Fund Development for Nonprofit Organizations
- PADM 659 Financial Management for Nonprofit Organizations
- PADM 661 Nonprofit Law, Governance and Ethics
Post-baccalaureate Certificate in Planning Information Systems

The certificate in planning information systems is a program to provide specialized cross-disciplinary training for professionals with either information systems or planning backgrounds who wish to increase their knowledge and skills in the application of computer methods to urban and regional planning problems. The program consists of nine hours of courses in information systems and nine hours in urban studies and planning.

Admission requirements are the same as for the Master of Urban and Regional Planning.
Post-baccalaureate Certificate in Public Management

The graduate certificate in public management is a program designed to enable practitioners in government and nonprofit organizations to acquire knowledge and skills in public administration without pursuing a full master’s degree. The certificate requires a total of 18 hours of graduate credits involving a mix of required and elective courses. The courses are the same as those offered to M.P.A. students. Admission to the certificate program requires the same application materials as the M.P.A. except a standardized examination is not required. Further details are available from the program office.

The graduate certificate in public management is offered in at least two locations off campus: Chesterfield County and Henrico County.
Post-baccalaureate Certificate in Urban Revitalization

The urban revitalization certificate program requires 18 semester hours of course work and can be completed in one academic year. A sequence of introductory courses exposes students to the planning process, housing policy, historic preservation, commercial revitalization, adaptive reuse of buildings and urban design. Course work in the area of urban revitalization is a blend of instruction in planning, urban design, business and economics.

Admission requirements include an official application; a letter of intent describing objectives in applying for the certificate; three letters of recommendation; two copies of an official transcript from an accredited institution showing undergraduate work and successful completion of an appropriate degree program with a minimum GPA of 2.7 (out of 4.0) in the last 60 semester hours of undergraduate study; demonstration of professional experience in planning or work related to the certificate program. The experience requirement may be waived for candidates who demonstrate professional promise. All credits earned are transferable to the Master of Urban and Regional Planning program.
College of Humanities and Sciences

School of Mass Communications

The School of Mass Communications has two graduate programs: one in scholastic journalism and the other, offered through the VCU Adcenter, in advertising.

General admission requirements

Both programs are open to graduates of accredited colleges and universities. Applicants must satisfy the general requirements for admission to graduate programs in the Graduate School and the College of Humanities and Sciences (see College of Humanities and Sciences guidelines in this bulletin). In addition, they should hold a baccalaureate degree in an area appropriate to the program to which they are applying and a GPA that indicates the ability to pursue graduate work. Although the type of undergraduate degree is not critical to admission, the programs require approved undergraduate curricula or the equivalent in order to grant full admission.

Judy VanSlyke Turk
Professor and Director

Graduate programs

Master of Science in Mass Communications – Advertising

Master of Science in Mass Communications – Scholastic Journalism
Master of Science in Mass Communications – Advertising

This program offers graduate studies in advertising at the VCU Adcenter. The program provides advanced preparation with concentrations in creative and strategic advertising development. The curriculum is divided into four tracks: art direction, copywriting, strategy (which includes account planning and account management) and creative media strategy (which includes media planning). The working environment at the Adcenter is similar to an advertising agency: teams of student art directors, writers, strategists and media planners work together to develop campaigns.

After the first year, qualified students are offered internships where they experience ad agency life and foster industry relationships. In their second year, students are given the opportunity to network through a mentoring program in which students are matched with agency professionals who offer advice and assistance.

Advertising program admission requirements

In addition to the M.S. in Mass Communications general admission requirements, applicants to the advertising program must submit:

- three recommendations from persons who are qualified to give information concerning the applicant’s probable success in graduate school and in the field of advertising.
- ten samples of nonreturnable work.
- a personal profile.
- other materials specified by the intended curricular track within the advertising program.

A full description of all Adcenter requirements is included in the VCU Adcenter Application kit, available on the Web at http://www.adcenter.vcu.edu or by calling the VCU Adcenter toll free at (800) 311-3341. Applications must be postmarked no later than June 1 prior to the fall semester for which admission is sought.

Degree requirements

The master’s program in advertising requires a minimum of 42 hours beyond the baccalaureate degree. Students devote two years of full-time study to complete the degree requirements. To graduate, students must present a final major project, in portfolio form, before a committee review panel.

All students in the advertising program must complete the following set of core courses:
### Core curriculum
- MASC 622 Documentary Production 3
- MASC 623 Ethics in Mass Communications 3
- MASC 650 Perspectives in Advertising 3
- MASC 651 Creative Thinking for Advertising 3
- MASC 655 Non-traditional Advertising Campaigns 3
- MASC 698 Portfolio Review 1
- MASC 699 Thesis 1
- Elective (outside MASC) 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASC 622 Documentary Production</td>
<td>3</td>
</tr>
<tr>
<td>MASC 623 Ethics in Mass Communications</td>
<td>3</td>
</tr>
<tr>
<td>MASC 650 Perspectives in Advertising</td>
<td>3</td>
</tr>
<tr>
<td>MASC 651 Creative Thinking for Advertising</td>
<td>3</td>
</tr>
<tr>
<td>MASC 655 Non-traditional Advertising Campaigns</td>
<td>3</td>
</tr>
<tr>
<td>MASC 698 Portfolio Review</td>
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<tr>
<td>MASC 699 Thesis</td>
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</tr>
<tr>
<td>Elective (outside MASC)</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total credits                                                | 20      |

### Specific requirements for each of the three Advertising Program tracks:

#### Art direction curriculum
- MASC 601 Advertising Technology for Art Directors 3
- MASC 630 Advertising Layout and Typography 3
- MASC 631 Advanced Art Direction/Ad Layout Techniques 3
- MASC 652 Advertising Concept Development 3
- MASC 653 Advanced Advertising Concept Development 3
- MASC 657 Broadcast Development and Production 3
- MASC 664 Presentation Skills 1
- MASC 696 Ad Portfolio Development 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASC 601 Advertising Technology for Art Directors</td>
<td>3</td>
</tr>
<tr>
<td>MASC 630 Advertising Layout and Typography</td>
<td>3</td>
</tr>
<tr>
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</tr>
<tr>
<td>MASC 652 Advertising Concept Development</td>
<td>3</td>
</tr>
<tr>
<td>MASC 653 Advanced Advertising Concept Development</td>
<td>3</td>
</tr>
<tr>
<td>MASC 657 Broadcast Development and Production</td>
<td>3</td>
</tr>
<tr>
<td>MASC 664 Presentation Skills</td>
<td>1</td>
</tr>
<tr>
<td>MASC 696 Ad Portfolio Development</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total credits                                                | 22      |

#### Copywriting curriculum
- MASC 602 Advertising Technology for Copywriters, Strategists and Media Planners 2
- MASC 640 Copywriting Techniques I 4
- MASC 641 Advanced Copywriting Techniques 3
- MASC 652 Advertising Concept Development 3
- MASC 653 Advanced Advertising Concept Development 3
- MASC 657 Broadcast Development and Production 3
- MASC 664 Presentation Skills 1
- MASC 696 Advertising Portfolio Development for Copywriters and Art Directors 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASC 602 Advertising Technology for Copywriters, Strategists and Media Planners</td>
<td>2</td>
</tr>
<tr>
<td>MASC 640 Copywriting Techniques I</td>
<td>4</td>
</tr>
<tr>
<td>MASC 641 Advanced Copywriting Techniques</td>
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<tr>
<td>MASC 652 Advertising Concept Development</td>
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<tr>
<td>MASC 653 Advanced Advertising Concept Development</td>
<td>3</td>
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<tr>
<td>MASC 657 Broadcast Development and Production</td>
<td>3</td>
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<tr>
<td>MASC 664 Presentation Skills</td>
<td>1</td>
</tr>
<tr>
<td>MASC 696 Advertising Portfolio Development for Copywriters and Art Directors</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total credits                                                | 22      |

#### Strategy curriculum
- MASC 602 Advertising Technology for Copywriters, Strategists and Media Planners 2
- MASC 629 Strategic Thinking 3
- MASC 649 Strategic Insight Development 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASC 602 Advertising Technology for Copywriters, Strategists and Media Planners</td>
<td>2</td>
</tr>
<tr>
<td>MASC 629 Strategic Thinking</td>
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<td>MASC 649 Strategic Insight Development</td>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>-------------------</td>
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</tr>
<tr>
<td>MASC 656</td>
<td>Advanced Strategic Insight Development</td>
</tr>
<tr>
<td>MASC 658</td>
<td>Account Leadership</td>
</tr>
<tr>
<td>MASC 661</td>
<td>Advertising Media Research and Planning</td>
</tr>
<tr>
<td>MASC 662</td>
<td>Advertising Research Methods</td>
</tr>
<tr>
<td>MASC 697</td>
<td>Advertising Portfolio Development for Strategists and Media Planners</td>
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<tr>
<td>MASC 602</td>
<td>Advertising Technology for Copywriters, Strategists and Media Planners</td>
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<tr>
<td>MASC 629</td>
<td>Strategic Thinking</td>
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<td>Strategic Insight Development</td>
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<td>MASC 656</td>
<td>Advanced Strategic Insight Development</td>
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<td>MASC 658</td>
<td>Account Leadership</td>
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<tr>
<td>MASC 661</td>
<td>Advertising Media Research and Planning</td>
</tr>
<tr>
<td>MASC 663</td>
<td>Advanced Creative Media Planning</td>
</tr>
<tr>
<td>MASC 697</td>
<td>Advertising Portfolio Development for Strategists and Media Planners</td>
</tr>
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</table>

**Creative Media Strategy curriculum**

<table>
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<tr>
<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>MASC 656</td>
<td>Advanced Strategic Insight Development</td>
<td>3</td>
</tr>
<tr>
<td>MASC 658</td>
<td>Account Leadership</td>
<td>2</td>
</tr>
<tr>
<td>MASC 661</td>
<td>Advertising Media Research and Planning</td>
<td>3</td>
</tr>
<tr>
<td>MASC 662</td>
<td>Advertising Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>MASC 697</td>
<td>Advertising Portfolio Development for Strategists and Media Planners</td>
<td>3</td>
</tr>
</tbody>
</table>
Master of Science in Mass Communications – Scholastic Journalism

The program in scholastic journalism is designed for secondary school teachers of journalism to prepare them for their role of training high school students and managing student publications, as well obtaining journalism endorsement and/or maintaining certification. This program consists of at least 35 credits, 17 of which are required courses in the School of Mass Communications. Two additional courses (six credits) are taken from sets of mass communications electives. The remaining nine credits are taken in courses external to the School of Mass Communications.

**Scholastic journalism program admission requirements**

In addition to the M.S. in Mass Communications general admission requirements, applicants to the scholastic journalism program must submit:

- three recommendations from persons who are qualified to give information concerning the applicant’s probable success in graduate school. If the applicant seeks endorsement or recertification for teaching journalism in a secondary school, one of these recommendation letters must be from a school principal.
- a letter detailing career goals and how the M.S. degree program in scholastic journalism applies to those goals.
- acceptable scores on the GRE.

Provisional admission may be granted under certain circumstances.

**Degree Requirements**

The master’s program in scholastic journalism requires a minimum of 35 credit hours beyond the baccalaureate degree. The hours are divided as follows:

<table>
<thead>
<tr>
<th>MASC core courses</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASC 501 Journalistic Writing</td>
<td>4</td>
</tr>
<tr>
<td>MASC 502 Editing the News</td>
<td>4</td>
</tr>
<tr>
<td>MASC 624 Basic Photojournalism</td>
<td>3</td>
</tr>
<tr>
<td>MASC 607 Student Press Law Rights and Responsibilities</td>
<td>3</td>
</tr>
<tr>
<td>MASC 613 Mass Media and Society</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

One of the following two courses

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
MASC 519 Journalism in the Schools
MASC 520 Advising Scholastic Publications

**Six credits from the following courses**
MASC 603 Scholastic Yearbooks
MASC 604 Broadcasting in High Schools
MASC 605 Technology in the Classroom
MASC 606 Contemporary Newspaper Design
MASC 611 Research Methods in Mass Communications
MASC 612 Mass Communications Theory
MASC 691 Topics in Mass Communications

**Nine credits from courses outside of the School of Mass Communications**

**Thesis in lieu of required standardized comprehensive exams only by permission of the Graduate Committee**

All candidates must establish a three-member examination/thesis committee by the third full-time semester or equivalent. The candidate must nominate a chair and a second member from the School of Mass Communications graduate faculty along with a third member from the graduate faculty outside of the School of Mass Communications.
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 of World Studies is a relatively unique entity within American higher education that builds on the strengths of existing disciplines in the humanities and the social sciences to provide its students with the knowledge, skills and experience necessary for success in an increasingly interdependent, globalized 21st century. The school will stimulate programs with an international focus across the campuses and develop close ties with such programs as African American Studies, Women's Studies, English, History and other units throughout the university. The school includes programs formerly offered by the Foreign Languages Program, the International Studies Program, the Anthropology Program and the Division of Religious Studies. Although the programs currently encompassed by the school are primarily at the undergraduate level, the new school will actively foster and promote a wide range of endeavors, including the establishment of interdisciplinary graduate programs. At the current time, the participating programs offer a select number of graduate courses.
College of Humanities and Sciences

Department of Biology

The Department of Biology offers programs leading to both master’s and doctoral degrees. 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 Genetics, Microbiology and Immunology, Pathology, Pharmacology and Toxicology, and Physiology. Visit the Department of Biology’s Web site: http://www.has.vcu.edu/bio.
Master of Science in Biology

Admission requirements

In addition to the general requirements for admission to the Graduate School, the following requirements of the Department of Biology represent the minimum acceptable standards for admission:

- bachelor's degree in biological or related science or equivalent
- appropriate college-level background in mathematics, chemistry and physics
- three letters of recommendation pertaining to the student’s potential ability as a graduate student in biology
- student’s written statement concerning career and research interests
- transcripts of all previous college work
- satisfactory scores on the GRE (general test)

Most entering graduate students in the Department of Biology have a 3.0 GPA or above on undergraduate work and a combined score of 1,000 or more on the verbal and quantitative sections of the GRE. Students who do not meet the minimum entrance requirements, but nevertheless wish to pursue an advanced degree in biology, are encouraged to contact the director of the graduate program in biology to discuss their interests and concerns. Admission on a provisional basis may be possible for students lacking the necessary requirements for full admission. Deficiencies must be removed by the end of the first year of residence. Courses that are remedial or designed to remove deficiencies will not be accepted toward the fulfillment of the course requirements for the master’s degree.

Degree requirements

Master of Science degree candidates are required to take a minimum of 30 semester credits, which shall include the following specifications:

- nineteen credits must be courses designated exclusively for graduate students
- a minimum of two and a maximum of four credits must be BIOL 693 Current Topics in Biology
- a minimum of six and a maximum of nine credits must be BIOL 698 Thesis
- at least five lecture or lecture laboratory courses must be taken from at least three different instructors (excluding Thesis, Research Seminar and Independent Study)

All graduate students are required to write a thesis proposal and a formal thesis following a prescribed format. The thesis proposal must be approved by the student’s graduate committee.
and the chair of the department to initiate thesis research. At the earliest possible opportunity, students must take STAT 543 or an equivalent statistics course approved by the student's graduate committee. Students entering the program with a statistics background equivalent to STAT 543 may petition the Biology Department Graduate Academic Committee to have this requirement waived.

A maximum of six semester hour credits from graduate work taken at other institutions may be transferred if they meet approval of the department.

Receipt of a grade of "C" or lower in two courses constitutes automatic dismissal from the graduate program in biology. Courses with a grade of "C" or lower cannot be applied to satisfying the degree requirements.

Each student will be required to pass a final examination, which will be primarily a defense of the thesis.

Continuous enrollment in the graduate program is required. Interruption in continuous enrollment for any reason without a leave of absence approved by the director of the graduate program in biology will require that students reapply to the Department of Biology Graduate Academic Committee.
Ph.D. in Biology

Applicants may pursue a Ph.D. degree through the Integrative Life Sciences program. This program is designed for students who desire to conduct research that is integrative across multiple disciplines and that takes a systems approach to emerging research questions across the many fields that comprise the life sciences. The program provides the opportunity to conduct research at multiple scales of study from the molecular to ecosystem levels with an emphasis on the concepts of systems biology and biological complexity.

See VCU Life Sciences – Ph.D. degree in Integrative Life Sciences for information on admission and degree requirements for the program.
College of Humanities and Sciences

Graduate minor in biology

The graduate minor in biology requires a minimum of nine semester hours excluding seminar and limited to a maximum of three credits of BIOL 692 Independent Study.
The Department of Chemistry offers programs leading to the Master of Science and Doctor of Philosophy degrees. The programs provide opportunities for concentrated study in analytical, inorganic, organic, polymer 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 Web site for more information: http://www.has.vcu.edu/che.

Admission requirements

In addition to the general requirements for admission to graduate programs in the Graduate School and the College of Humanities and Sciences, students are expected to have a bachelor's degree from an accredited college or university with 30 semester credits in chemistry. Admission on a provisional basis is possible for a student temporarily lacking this expected chemistry background. Acceptance is based upon undergraduate performance, satisfactory scores on the GRE and letters of recommendation.

Graduate students in the Department of Chemistry may receive financial support via teaching or research assistantships or fellowships. Application forms and instructions for applying to all graduate programs are available on the Graduate School Web site at http://www.vcu.edu/graduate.

General degree requirements

Entering graduate students are required to take proficiency examinations in analytical, inorganic, organic and physical chemistry. These examinations are at the level of sound undergraduate courses and are offered preceding the start of the school's fall semester, the start of the spring semester and after the spring semester ends. These tests are used to evaluate the student's strengths and weaknesses, and the student's program is planned accordingly.
College of Humanities and Sciences

Master of Science in Chemistry

Degree requirements

Students preparing for the Master of Science degree must demonstrate competency in analytical, inorganic, organic and physical chemistry. New students who do well on the proficiency examinations may, by decision of the chemistry faculty, be considered to have demonstrated the necessary competency. The proficiency examinations may be repeated and must be completed by the end of the second semester of study. The Master of Science student is expected to earn a minimum of 15 semester credits in six graduate courses in chemistry, not including credit for seminar, and at least 12 semester credits in research. The credit hours must include three of the following core courses (9 credits) selected from the following four areas. The total of all credits must be at least 30.

Analytical
CHEM 532 Advanced Analytical Chemistry

Inorganic
CHEM 620 Advanced Inorganic Chemistry I

Organic
CHEM 504 Advanced Organic Chemistry I

Physical
CHEM 510 Atomic and Molecular Structure
CHEM 511 Chemical Thermodynamics and Kinetics

Additional graduate courses to be taken will be determined in consultation with the faculty research adviser and the faculty of the Department of Chemistry. Graduate students may elect to take courses offered on the MCV Campus. Among the courses of interest to chemistry students taught at the MCV Campus are medicinal chemistry, stereochemistry, heterocyclic chemistry, general biochemistry, circuit design and analysis, and molecular modeling. The School of Medicine section of this bulletin should be consulted for other courses. Students are expected to participate in the department’s seminar program each semester and to present at least two formal talks in the seminar program. An acceptable research thesis and a final oral examination on the thesis are required. Full-time students should complete these degree requirements in two to three years.
Ph.D. in Chemistry

Degree requirements

Students seeking the Doctor of Philosophy degree must demonstrate competency in analytical, inorganic, organic and physical chemistry. Students who do exceptionally well in the proficiency examinations may, by decision of the chemistry faculty, be considered to have demonstrated the necessary competency. The proficiency examinations may be repeated and must be completed by the end of the second semester of study.

Students preparing for the Doctor of Philosophy degree must have a minimum of 18 credits in eight graduate courses, not including credit for seminar or research. Credits must include three of the core courses (9 credits) selected from the four areas listed in the master's requirements. Other graduate courses to be taken will be determined in consultation with the faculty research adviser and the faculty of the Department of Chemistry. Students are expected to participate in the department’s seminar program and present at least two formal talks in the seminar program. In addition to course work and seminar, the doctorate requires a minimum of 30 credits in CHEM 697 (directed research), and the total of all credits must be at least 60.

The student is required to complete written and oral examinations in his/her major field to become a doctoral candidate. The oral examination includes the presentation and defense of the proposed dissertation research. The student must conduct a substantial original investigation under the supervision of his/her adviser and must prepare a dissertation reporting the results of the research and analyzing its significance in relation to existing scientific knowledge. An oral defense of the dissertation will be held. Full-time students should complete the degree requirements in four to five years.
Ph.D. in Chemical Physics

Students entering the chemical physics program must pass proficiency examinations in two areas of chemistry and two areas of physics (mechanics, electricity and magnetism).

Students entering with a bachelor's or master’s degree in chemistry who have not taken the courses previously may satisfy the physics requirement with an "A" or "B" in PHYS 301, 302 and 376. Students entering with a bachelor's or master’s degree in physics who have not taken the courses previously may satisfy the chemistry requirement with an "A" or "B" in two of the three courses, CHEM 301-302, CHEM 406 and CHEM 409.

Students in the chemical physics program are required to complete CHEM 510, CHEM 612, PHYS 576, PHYS 580 and PHYS 641 plus three courses from the following list: CHEM 504, 532, 550, 610, 611, 615, 616, 620; PHYS 550, 571, 573, 661; MATH 517, 518. A minimum of four graduate courses must be in chemistry. All graduate students seeking the Ph.D. degree must complete 30 hours of CHEM 697 (research) as part of fulfilling the requirements for the degree. However, students electing the chemical physics option may substitute 15 credits of PHYS 697 for 15 credits of CHEM 697.

All other requirements are the same as those stated for the Ph.D. in Chemistry.

Additional information and a more detailed description of the graduate program may be obtained from the Department of Chemistry.
College of Humanities and Sciences

Department of English

The Department of English offers the Master of Arts in English and the Master of Fine Arts in Creative Writing. Visit the department’s Web site at http://www.has.vcu.edu/eng for complete program information.

Marcel Cornis-Pope
Professor and Department Chair

Graduate programs

Master of Arts in English

Master of Fine Arts in Creative Writing
Master of Arts in English

The Department of English offers a program leading to a Master of Arts in English with two areas of emphasis or concentration.

The program provides maximum flexibility by allowing each student, in consultation with the student’s graduate committee, to select the concentration that will best develop the student’s competence in those areas most relevant to scholarly and professional objectives.

Programs leading to the Master of Arts in English are:

- **Writing and rhetoric.** Designed for the candidate who is seeking intensive work in both writing and teaching expository prose or for the candidate who plans to pursue the doctor of philosophy degree.

- **Literature.** Designed for the candidate who desires intensive work in English or American literature beyond the bachelor’s level or for the candidate who plans to pursue the doctor of philosophy degree.

**Admission requirements**

In addition to the general requirements for admission to graduate programs in the Graduate School and the College of Humanities and Sciences, the following requirements, established by the English Graduate Studies Committee, represent the minimum acceptable standards for admission:

- a baccalaureate degree in an area appropriate to the study of literature or writing,

- a GPA that indicates the applicant can pursue successfully a graduate degree,

- three letters of recommendation from former instructors, and

- completion of the GRE. (Applicants for the literature track may, but are not required to, submit scores for the GRE subject test in literature.)

**Degree requirements**

The English program consists of a minimum of 30 semester credits. After these credits have been attained, students shall be examined over their courses and research as the Graduate Committee recommends. Students also may wish to present a thesis or project, credit for which shall be determined by the Master of Arts Committee.
The Master of Fine Arts in Creative Writing is designed to attract students from diverse undergraduate backgrounds who are writers of promise. The program is suited particularly to those interested primarily in the writing of fiction and poetry; however, some emphasis also is placed on the writing of nonfiction, playwriting and screenwriting.

Graduate students in creative writing are encouraged to develop a strong personal sense of aesthetics and ethics and to pursue excellence in writing and scholarship, as well as in teaching, if they are pursuing that career option. Through the workshop experience, as well as personal conferences with the writing faculty, the program aims to help students significantly advance the quality of their writing, to enable them to become expert critics of their own and others’ work, and to advise them as they seek to publish their writing.

Admission requirements

Admission to the Master of Fine Arts Program is based most importantly on the candidate’s submitted creative writing portfolio (thus students who have produced little or no creative writing prior to their application would not be eligible. The deadline for application to the Master of Fine Arts Program is Feb. 1. In addition to the general requirements for admission to graduate programs in the Graduate School and the College of Humanities and Sciences, the following requirements, established by the Creative Writing Master of Fine Arts Committee, represent the minimum acceptable standards for admission:

- A portfolio of promising fiction or poetry, possibly with drama (as a minimum, approximately eight to 10 poems, or 20 or more pages of fiction, or one act from a play, or some combination of these; in all cases, applicants should submit only their strongest creative writing samples) to be submitted to the M.F.A. program director.

- Three recommendations from persons who are qualified to give information concerning the applicant’s probable success in graduate school, especially in a creative writing program.

- A scholastic record that is indicative of the applicant’s ability to pursue a graduate degree successfully.

- A baccalaureate degree or its equivalent.

- Completion of the GRE (the subject test in literature is not required for M.F.A. applicants).

Degree requirements

A total of 48 semester hours is required to complete the degree. The basic course of study
required in the program includes: 12 semester hours of graduate creative writing workshops (required), 12 hours of graduate literature courses (required), and six to 12 hours of thesis work (required); the remaining 12 to 18 hours are electives, taken in literature, workshops or other graduate courses. Beyond the required courses, the student is free to work out a total program of 48 hours, with the advice of the program director or the student’s thesis adviser, which is appropriate to the individual student’s aims and interests. The thesis work gives students the opportunity to produce a manuscript of publishable quality. Course work also is available in the techniques of teaching creative writing, and the program is flexible enough to include studies undertaken in other departments of the university as well, including Art History, Theatre, Philosophy and the School of Mass Communications.
Forensic Science

The Forensic Science program offers undergraduate and graduate programs. The Master of Science is one of only 15 of its kind in the United States. It is designed to prepare students for careers as forensic scientists in government and private agencies and laboratories.

Broad exposure to the specializations within the field is offered, including drug analysis, DNA analysis, trace evidence, criminalistics and legal issues. A strong emphasis on laboratory courses provides students with significant laboratory experience prior to graduation. Required laboratory courses are taught at the Virginia Division of Forensic Science Laboratory, which is nationally accredited by the American Society of Crime Laboratory Directors.

For more information visit [http://www.has.vcu.edu/forensics](http://www.has.vcu.edu/forensics).
The objective of the Master of Science in Forensic Science program is to prepare students for careers as forensic scientists in government and private laboratories. Broad exposure to the specializations within the field is offered, including drug analysis, DNA analysis, trace evidence, criminalistics and legal issues. A strong emphasis on lab courses provides students with significant laboratory work prior to graduation. Required lab courses are taught at the Virginia Division of Forensic Science Lab, which is nationally accredited by the American Society of Crime Laboratory Directors.

The Master of Science in Forensic Science program requires 36 semester hours of course work. The graduate program is designed to accommodate full-time students. Nearly all courses are offered in the evenings after 4 p.m.

Admission requirements

Beyond the general Graduate School standards listed in the Graduate Studies at VCU section in this bulletin, admissions will be based on:

- a minimum GPA of 2.7 on a 4.0 scale in undergraduate course work.
- a combined score of 1,000 or more on the verbal and quantitative sections of the GRE. Call (800) GRE-CALL for exam information.
- previous evidence of ability to perform graduate level work (where applicable).
- four-year undergraduate degree in one of the natural sciences.
- completion of eight credits of organic chemistry with laboratory.

Final deadline for receipt of all application materials is March 1 each year for fall admission. Applications received prior to this date will be reviewed as received, with first acceptances being offered as early as Jan. 15. All applicants will be notified of decision. There are no spring admissions in the program. A phone or in-person interview may be requested for admission.

Degree Requirements

In addition to general graduation requirements, students must complete:

- a minimum of 36 graduate semester credits as outlined in the accompanying list of core requirements and electives.
- the 36 semester credits referenced above with an overall GPA of 3.0 or above.

Core requirements
FRSC/CRJS 571 Survey of Forensic Science 3
FRSC/CRJS 670 Forensic Evidence and Criminal Procedure 3
FRSC 671 Drug Analysis (lecture/laboratory) 3
FRSC 673 Trace Evidence (lecture/laboratory) 3
FRSC 675 Serology and DNA (lecture/laboratory) 3
FRSC 677 Expert Testimony in Forensic Science 3
FRSC 793 Forensic Laboratory Internship 3

Electives (choose 5)
BIOL 530/HGEN 501 Human Genetics
BIOS 543/STAT 543 Statistical Methods I
CLLS 501, 502 Instrumental Methods of Analysis I, II
FRSC 672 Advanced Drug Analysis (lecture/laboratory)
FRSC 674 Criminalistics (lecture/laboratory)
FRSC 676 Forensic Biology and DNA (lecture/laboratory)
FRSC/CRJS 680 Forensic Psychiatry
PHTX 535 Introduction to Toxicology
PHTX 644 Forensic Toxicology
Other electives permitted with permission of adviser.

Financial information

Information and application forms for financial aid information may be secured from the VCU Office of Financial Aid, 901 W. Franklin St., Room 107, Richmond, VA 23284-3026, (804) 828-6669.

Correspondence and information

General program information can be obtained by accessing the program’s Web site at http://www.has.vcu.edu/forensics. Application forms and instructions for applying to all graduate programs are available on the Graduate School Web site at http://www.vcu.edu/graduate.
College of Humanities and Sciences

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 http://www.has.vcu.edu/his.

Joseph W. Bendersky
Professor and Department Chair

Graduate program

Master of Arts in History
The Master of Arts in History program allows maximum flexibility by permitting each student, in consultation with the department’s director of graduate studies, to select those courses most appropriate to their interests, in order to develop competence in pursuit of his or her scholarly and professional objectives.

**Admission requirements**

In addition to the general requirements for admission to graduate programs in the Graduate School and the College of Humanities and Sciences, the following requirements, established by the History Graduate Affairs Committee, represent the minimum acceptable standards for admission:

- 30 hours of undergraduate history courses, of which 18 should be at the upper-division level
- A GPA that is indicative of the applicant’s ability to successfully pursue a graduate degree
- Three recommendations from persons who are qualified to give information concerning the applicant’s probable success in graduate school
- Completion of the GRE
- Submission of a 500-word written statement of intent, indicating why the applicant wishes to pursue a graduate degree in history

A personal interview is not required, but may be requested by either the applicant or the department’s Graduate Affairs Committee.

**Degree requirements**

The Master of Arts in History may be achieved through one of two options. The thesis option requires 30 semester credits, including six credits of HIST 698; or the non-thesis option requires 36 semester credits. Those in the non-thesis track must take a minimum of six semester credits in research-level courses, and also an oral comprehensive exam. All students in both tracks must take HIST 601 as a prerequisite or corequisite for all research courses; students entering in January should take HIST 601 the next time it is offered.

**Elective courses**

Students may take up to six semester credits of non-history electives from an approved list. The department’s Graduate Affairs Committee maintains the list of approved courses, and students may use these courses for credit with the approval of the graduate director. In addition, students who wish to pursue specific areas of study may, with the approval of the graduate director,
substitute other courses when appropriate, but in no case shall be able to count more than six semester hours of non-history courses.
Department of Mathematics and Applied Mathematics

The Department of Mathematics and Applied Mathematics offers programs leading to a Bachelor of Science in Mathematical Sciences and a Master of Science in Mathematical Sciences with a concentration in either applied mathematics or mathematics. The curriculum of both programs is run jointly with the Department of Statistical Sciences and Operations Research.

The department also offers a post-baccalaureate undergraduate certificate in mathematical sciences. Students seeking more information or wishing to enter the certificate program should contact the Department of Mathematics and Applied Mathematics.
Master of Science in Mathematical Sciences

A Master of Science in Mathematical Sciences is offered jointly by the Department of Mathematics and Applied Mathematics and the Department of Statistical Sciences and Operations Research. The Master of Science in Mathematical Sciences offers specializations in several possible areas, including applied mathematics, mathematics, operations research, statistics, statistical computing, applied computational mathematics, discrete structures and others.

Admission requirements

In addition to the general requirements for admission to graduate programs listed in the Graduate Studies at VCU section and the College of Humanities and Sciences section of this bulletin, the following requirements represent the minimum acceptable standards for admission:

- Thirty credits in undergraduate mathematical sciences, computer science or related areas of which at least 18 semester credits must represent upper-level courses.
- Three letters of recommendation pertaining to the student’s potential ability as a graduate student in mathematical sciences.
- General GRE scores required.

Provisional admission may be granted when deficiencies exist. These deficiencies must be removed by the end of the first year of residence, or its part-time equivalent, when the student’s application will be re-examined. Courses that are remedial or designed to remove deficiencies will not be accepted for credit toward the fulfillment of the course requirements for the master’s degree.

M.S. in Mathematical Sciences program

The program offers maximum flexibility by allowing students, in consultation with their graduate committees, to design a course of study that will best develop competence in those areas most relevant to their scholarly and professional objectives. This program consists of a minimum of 30 semester credits of which at least 15 must be at the 600 level. Each student will select either the thesis or non-thesis option.

A student who chooses the thesis option has a choice of writing a research thesis or an expository thesis. A research thesis is one which, in the opinion of the student’s thesis adviser and thesis committee, contains significant original research.
Students who choose to specialize in operations research or statistics with the thesis option may count six credits of STAT 698 or OPER 698. Otherwise, a student may write an expository thesis. For this type of thesis, the student may count three credits of STAT 698 or OPER 698. The student who elects the non-thesis option must pass a written examination and may be asked to take an oral examination. Note that the following courses may not be applied to the credit requirements for the M.S. in Mathematical Sciences: STAT/SOCY 508, SOCY 543, STAT/BIOS/PMCH 543 and STAT/SOCY 608.

### Non-thesis option

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Mathematical sciences (including both semesters of a 600-level sequence)</td>
<td>21</td>
</tr>
<tr>
<td>Mathematical sciences or allied field*</td>
<td>6-9</td>
</tr>
<tr>
<td>Research seminar credits**</td>
<td>2-5</td>
</tr>
<tr>
<td>Directed research credits**</td>
<td>0-3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

### Thesis option

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematical sciences (including both semesters of a 600-level sequence)</td>
<td>18</td>
</tr>
<tr>
<td>Mathematical sciences or allied field*</td>
<td>6-9</td>
</tr>
<tr>
<td>Thesis credits</td>
<td>3 or 6</td>
</tr>
<tr>
<td>Research seminar credits**</td>
<td>1-3</td>
</tr>
<tr>
<td>Directed research credits**</td>
<td>0-3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

* Courses selected from an allied field must be approved by the department’s Graduate Affairs Committee.

** The student who chooses the non-thesis option may receive a maximum total of four credits for MATH 690 Research Seminar and MATH 697, OPER 697 or STAT 697 Directed Research. The student who chooses the thesis option usually will not take directed research, but he or she is not prohibited from doing so. In the thesis option, a total of seven credits for thesis, research seminar and directed research is the maximum credit permitted.

### Specializations

Students may obtain a designation on their transcripts indicating that their graduate study has emphasized one of the following graduate concentrations by completing the requirements that are listed here for that concentration. A student who has not satisfied the requirements for one of these concentrations, but who has otherwise fulfilled all the requirements for a master’s degree, will be awarded a degree of Master of Science in Mathematical Sciences without any specialization.

### Master of Science in Mathematical Sciences with a concentration in applied mathematics

MATH 517, 518*; a six-credit sequence selected from MATH 617-618, 619, 620, 621 and at least six credits selected from MATH 511, 512, 515, 516, 527-528, 615, 689, STAT 513-514. Also, at least one seminar and the thesis (if chosen) must concern topics of applied mathematics.
Master of Science in Mathematical Sciences with a concentration in mathematics

MATH 507, 508*; a six-credit sequence selected from 601-602, 603-604, 607-608, 611-612, and at least three credits from MATH 505, 509, 510, 521, 525 or any otherwise uncounted 600-level course for this concentration. Also, at least one seminar and the thesis (if chosen) must concern topics of pure mathematics.

Master of Science in Mathematical Sciences with a concentration in operations research

OPER 527-528, STAT 541; two courses selected from OPER 631, 641, 643, 645, 647, STAT 613, 614, 648, 649, or approved OPER 691 and/or STAT 691 and at least one two-course sequence selected from (1) STAT 643 and 644, (2) STAT 642 and one of 623, 626, 643, 645, (3) CMSC 508 and 608, (4) INFO 610 and 614. Also, at least one seminar and the thesis (if chosen) must concern topics of operations research.

Master of Science in Mathematical Sciences with a concentration in statistics

STAT 513, 514* and nine additional credits in statistics courses, including at least six credits in 600-level statistics courses. Three of the 600-level credits must be selected from STAT 613-614, STAT 645 or STAT 691** and three credits from STAT 623, STAT 626, STAT 644 or STAT 691.** Also, at least one seminar and the thesis (if chosen) must concern topics of statistics.

* If a student previously received credit for one or both of these courses or their equivalent, then one or two of the other courses mentioned for this concentration must be taken as substitute(s) to satisfy the minimum requirement of 15 credits of course work in the concentration.

** Use of STAT 691 to meet this requirement must be approved by the Department of Statistical Sciences and Operations Research and the Graduate Affairs Committee of the department at the time the course is scheduled.
Department of Physics

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

Graduate programs

- Accelerated B.S.-M.S. program
- Master of Science in Physics
- Ph.D. in Medical Physics

Robert H. Gowdy
Associate Professor and Department Chair
Accelerated B.S.-M.S. Program

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 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.
Master of Science in Physics

The Master of Science program offers traditional core physics courses and a variety of specialized electives emphasizing the department’s strengths in theoretical and experimental physics. Research interests include theoretical and experimental condensed matter physics, general relativity and cosmology, and physics education. This degree is designed to be completed in two years (four semesters). Detailed information is available at http://www.has.vcu.edu/phy.

Admission requirements

In addition to the general requirements for admission to graduate programs in the Graduate School and the College of Humanities and Sciences, students are expected to satisfy the following minimum standards for admission:

- Students must have a minimum of 30 semester credits in undergraduate physics or engineering, of which at least 18 semester credits must be at the upper level in physics.
- Satisfactory GRE scores.
- Provisional admission may be granted where deficiencies exist. These deficiencies must be removed by the end of the first year of residence or its part-time equivalent, when the student’s application will be re-examined. Courses that are designed to remove deficiencies will not be accepted for credit toward the graduate degree.

Course requirements

Each student is required to take 30 semester credits of approved graduate courses (see M.S. plan of study) with at least 15 semester credits at the 600 level. PHYS 690 and PHYS 697 may not exceed 15 of the required 30 credit hours.

M.S. plan of study

Each student will choose a primary adviser during the first semester of study. At the end of the first semester, the student and adviser will propose an M.S. plan of study to the Graduate Curriculum Committee. This plan will include the graduate courses and research subject matter to fulfill the student’s individual career goals.

Normally, each student will select courses for their individual M.S. plan of study from the list of graduate courses in physics. The courses selected will include no fewer than nine credits of traditional physics core courses, such as PHYS 576 and PHYS 580, to provide a solid foundation in fundamental physics. However, students also may select graduate courses in chemistry, mathematics, computer science and engineering, as well as from the schools of Medicine and Education, when such courses are consistent with the student’s career goals.
The M.S. plan of study must be approved by the Physics Graduate Curriculum Committee. Courses taken outside this plan will not count toward the above general course requirements.

**Thesis or non-thesis option**

Each student must select either the thesis option or non-thesis option. Students selecting the thesis option must take at least nine credit hours of PHYS 697 Directed Research. No more than nine semester credits of Directed Research may be counted toward the 15 credit 600-level requirement.

Students selecting the non-thesis option may take no more than three hours of PHYS 697. A student who elects the non-thesis option must pass a written comprehensive exam. This exam will be administered by the Physics Graduate Curriculum Committee.
Ph.D. in Medical Physics

The Ph.D. in Medical Physics offers students course work and research training in physics as it is applied to the diagnosis and treatment of human diseases. Research interests include functional imaging using PET and NMR, CT image artifact removal and deformation, intensity-modulated radiation therapy, radiation therapy dose calculations, 4D radiation therapy, and brachytherapy dose calculations. Detailed information is available at http://www.has.vcu.edu/phy/medphys.htm.

Admission requirements

In addition to the general requirements for admission to graduate programs in the Graduate School and the College of Humanities and Sciences, students are expected to satisfy the following minimum standards for admission:

- Students must have a minimum of 30 semester credits in undergraduate physics, physical science or engineering, of which at least 18 credits must be at the upper level.
- Satisfactory GRE scores.
- Provisional admission may be granted where deficiencies exist. These deficiencies must be removed by the end of the first year of residence or its part-time equivalent, when the student's application will be re-examined. Courses that are designed to remove deficiencies will not be accepted for credit toward the graduate degree.

Degree requirements

Students entering the program with an undergraduate degree are required to earn a minimum of 30 credits in didactic or laboratory course work. Students entering with a master's degree in medical physics, physics or an appropriate related field, are required to earn a minimum of 18 course credits. In addition to course work, the Ph.D. requires a minimum of 12 credits in PHYS 697 (directed research). At least half of the course work must be earned at the 600 level or higher. Detailed degree requirements are listed in the Medical Physics graduate handbook.

All new students entering the program initially will be advised by the Medical Physics Graduate Advisory Committee, until they have selected a research adviser and formed a graduate dissertation committee. Each student should select a research adviser and area of research before the end of his/her third semester. A graduate dissertation committee will direct the student in his/her research and subsequent course selection, will report annually to the program director on the academic progress of the student and will administer the oral candidacy and dissertation defense examinations.

The student is required to complete written and oral examinations to be admitted as a Ph.D. candidate. The comprehensive written examination covers core knowledge and applications in
medical physics course work, as well as basic concepts in physics, chemistry and biology. The oral examination, administered by the student’s graduate dissertation committee, is based upon a written prospectus describing the proposed dissertation research project. Examiners evaluate the adequacy of the proposed project, the student’s level of understanding of the project and the likelihood that the dissertation can be completed successfully.

After becoming a Ph.D. candidate, the student must conduct a substantial original investigation under the supervision of his/her adviser and must prepare a dissertation reporting the results of the research in the context of existing scientific knowledge. After the dissertation has been completed and unanimously accepted for defense by the student’s graduate dissertation committee, the candidate will appear before the committee for an oral defense. The oral dissertation defense examines the candidate’s research, dissertation documentation, and underlying fundamental knowledge. Upon successful completion of the defense and dissertation, the student may apply for graduation with a Ph.D. in Medical Physics.
Department of Psychology

The Department of Psychology offers instruction in clinical, counseling and general psychology leading to the Doctor of Philosophy degree. Students in all three programs are educated first as psychologists and then helped to develop competence in a more specialized area relevant to their scholarly and professional objectives. In addition, special training and experience in college teaching is available.
Ph.D. in Psychology

The doctoral programs in clinical and counseling psychology are accredited by the American Psychological Association. The programs emphasize the scientist-practitioner model and prepare students for research and service in professional psychology, including positions in university academic and medical school departments, counseling centers, mental health agencies and hospitals, physical health facilities, and other organizational settings.

The clinical psychology program offers tracks in adult, child and behavioral health psychology. The counseling psychology program emphasizes the enhancement of life skills and personal competence. Typical subspecializations include disease prevention and health promotion, career and life planning, work with medical populations, college students, community outreach, interpersonal processes, group counseling, marriage and family counseling, multiculturalism and sport psychology.

The program in general psychology prepares students for basic or applied research and includes three divisions: biopsychology, developmental and social psychology. The program in developmental trains students for work in either college/university academic departments or applied settings. Applied developmentalists work in a variety of settings and programs (violence prevention, community intervention, schools, family service agencies, nonprofit agencies, health care settings, disability agencies) with a variety of human populations (infants and young children, school-age children, adolescents, at-risk youth, incarcerated youth and adults, parents, older adults, persons with disabilities); they do not offer counseling/therapy services.

The Center for Psychological Services and Development, a campus-based community service agency operated by the department, provides training opportunities for graduate students in all departmental programs, including practicum and research training for graduate students in the clinical and counseling psychology programs. A wide variety of other on- and off-campus practicum placements also are available.

The department maintains laboratory facilities for research in the areas of behavioral assessment, behavioral medicine, developmental, learning, behavioral pharmacology, psychophysiology, psychotherapy process, social perception, social influence and group dynamics. Opportunities for field research also are available in a variety of settings. A collection of current journals and books in psychology is housed in the James Branch Cabell Library on the Monroe Park Campus and in the Tompkins-McCaw Library on the MCV Campus.

Teaching assistantships, research assistantships and paid practicum placements are available.

Admission requirements
In addition to the general requirements for admission to the graduate programs in the Graduate School (in the Graduate Studies at VCU section of this bulletin), the following requirements represent the minimum acceptable standards for admission:

- Graduation with a bachelor’s degree from an accredited college or university, but not necessarily with a major in psychology.
- 18 semester hours of undergraduate course work in psychology is the minimal, but not optimal, number of hours for an applicant to be considered for admission. Included must be each of the following courses: general psychology, statistics, and experimental psychology. Exceptionally well-qualified applicants with less than a major in psychology, or applicants whose undergraduate work is considered outdated by the admissions committee, may be advised to complete some additional undergraduate courses at the beginning of their graduate study program.
- An undergraduate record indicating superior academic potential.
- Satisfactory performance on the GRE.
- Three letters of recommendation from previous instructors.
- A personal interview may be required at the discretion of the department.

The number of students who can be admitted is limited by the facilities and staff available. All applicants will be notified of the decision made. The screening process may begin as early as Jan. 1. First offers of admission are made by April 1. By June 1, after other offers to alternates have been made and final acceptances by students have been received, admissions may be closed. The application deadline is Dec. 1 (preferred) and Dec. 10 (required) for the clinical and counseling programs, and Jan. 15 for developmental, social, and biopsychology.

Applicants to the general psychology program should specify to which of the three divisions they are applying (i.e., biopsychology, developmental, or social).

Transfer credits for graduate work at other institutions will be evaluated after the completion of nine semester hours in the department.

**Degree requirements**

The following requirements are in addition to those described for the graduate programs in the Graduate School (the Graduate Studies at VCU section of this bulletin) and College of Humanities and Sciences (beginning of the College of Humanities and Sciences section of this bulletin).

All students are required to complete a core curriculum of 15 credits (or its equivalent for students entering with a master’s degree).

Students who receive grades of "B" or better in each of the department core courses are considered to have fulfilled the university requirements of a master’s level comprehensive examination and will then officially be considered candidates for the Master of Science degree. Students who receive grades of "C" or lower in two or more department core courses will have failed the comprehensive examination and will be dismissed automatically from the program. Students who receive a grade of "C" or lower in one of the department core courses must either (a) satisfactorily complete a re-examination of the material covered in the course within one semester following the receipt of the grade (this re-examination is to be arranged and evaluated...
by the course instructor), or (b) repeat the course for credit the next time it is offered and receive a grade of "B" or better. Regardless of which of these approaches is chosen, the students will be given only one opportunity to demonstrate that they have mastered the course material. Students who either fail the re-examination or repeat the course and receive a grade of "C" or lower will have failed the comprehensive examination and will be dismissed from the program.

Additional courses and training experiences will be determined in consultation with and subject to the approval of the student’s faculty adviser and graduate program committee.

Receipt of a grade of "C" or lower in two courses, or grades of "C" or lower in more than six credits of psychology courses, constitutes automatic dismissal of a student from the program.

All students are required to complete a master’s thesis and to defend it successfully in an oral examination. Ideally, the thesis should be publishable as a piece of research and make a contribution to the field of psychology. Students who have previously completed a master’s thesis in psychology at another university may have the thesis requirement waived if the thesis is accepted by their graduate program committee.

The residence requirement for the master’s degree is 18 hours, nine in each of two consecutive semesters. Completion of the degree usually requires four semesters. At least six semester credits in PSYC 798 Master’s Thesis must be completed, and no more than six can be counted toward the M.S. degree.

Students are obligated to request, in writing from their program committees, continuation of study beyond the master’s degree and approval of their doctoral plan of study. Application from a student for continuation beyond the master’s level will be evaluated by the appropriate program committee after completion of all requirements for the master’s degree. The program committee reviews the student’s request and approves or disapproves the request.

The student must pass a written preliminary examination to become a doctoral candidate. Students are required to complete this requirement prior to defense of their dissertations and prior to leaving on internship for students in the clinical and counseling psychology programs.

With the consent of the program committee, doctoral students may design a minor consisting of courses in departments other than psychology or courses in an area of psychology other than the major.

Both the clinical and counseling psychology programs require completion of applied practica and a one-year predoctoral internship approved by the program committee. Research practica are required by all programs. Practicum credit will vary depending on the program. Internship will be one-half credit per semester.

A dissertation requiring the planning, completion and oral defense of an original research project is an integral part of the doctoral program. At least 12 semester credits in PSYC 898 Doctoral Dissertation must be completed, and no more than 12 can be counted toward the Ph.D. degree.

Completion of the entire program usually requires four to six years (including the internship year...
for students in the clinical and counseling programs. Candidates must complete all requirements for the Ph.D. degree within a seven-year period from the date of admission to the graduate program unless permission is granted for an extension. In some cases, specific programs and divisions may have requirements in addition to those stated here.

A more detailed description of the requirements for each of the graduate programs is included in the Department of Psychology’s Graduate Student Handbook, which is provided to each incoming graduate student. Visit the Web site for more information: http://www.has.vcu.edu/psy.

**Curriculum requirements**

**Department core**

PSYC 619 Learning and Cognition  
PSYC 620 Design and Analysis of Psychological Research  
PSYC 621 Statistics in Psychological Research  
PSYC 617 Sensation and Perception or PSYC 629 Biological Basis of Behavior  
Ethics: choose one of the following:  
   a. PSYC 675 Ethical Principles of Psychology (two credits) or  
   b. GRTY 606 Aging and Human Values (three credits) or  
   c. MICR 510 Scientific Integrity (one credit)

**Clinical psychology program**

Successful completion of clinical psychology program core courses (PSYC 616, 627, 643, 644, 645 or 649, 650, 652 or 667).  
Successful completion of 22 credit hours of clinical practicum (PSYC 694) and one credit hour of research practicum (PSYC 690). Up to six credit hours may be waived depending on experience and ability.  
Successful completion of one three-credit assessment elective (e.g., PSYC 626, 641, 645, 646, 647, 648, 649).  
Successful completion of one three-credit therapy/intervention elective (e.g., PSYC 623, 624, 652, 653, 654, 656, 660, 666, 667, 668, 669, 670).  
Students need to meet a social aspects of behavior breadth requirement by successfully completing PSYC 630, PSYC 633 or another graduate course in social aspects of behavior approved by the clinical faculty.  
Students need to meet a cultural/individual diversity breadth requirement by successfully passing PSYC 677 or another graduate course in cultural/individual diversity approved by the clinical faculty.  
Successful completion of three one-half credit consecutive semesters of an approved predoctoral internship, PSYC 696.  
A minimum of 87.5 semester hours of approved courses beyond the baccalaureate degree.  
Students should, if planning to practice clinical psychology, attend to the current licensure requirements of the state in which they plan to practice.

**Counseling psychology program**

Counseling psychology program core curriculum successfully completed (PSYC 608, 611, 616, 623, 625, 643, 644, 645, 651, 655, 660/or approved health psychology elective, 676, and 695).  
Successful completion of 12 credit hours of counseling practicum (PSYC 693) and three credit hours of research practicum (PSYC 690).
Successful completion of other required courses, including PSYC 603 or 633 or other approved developmental course.

Students need to meet a social aspects of behavior breadth requirement by successfully completing PSYC 630 or another graduate course in social aspects of behavior approved by the counseling faculty.

Successful completion of three one-half credit consecutive semesters of an approved predoctoral internship (PSYC 696).

A minimum of 88 credit hours of approved courses beyond the baccalaureate degree. The current recommended curriculum totals 97.5 credit hours.

**General psychology program**

General psychology program doctoral courses completed (PSYC 638; three hours of 671 and/or 690; and 602 or 603 or 605).

Successful completion of one of the following specialized division curricula:

**Biopsychology division curriculum**

PSYC 629, PSYC 617, PSYC 639 and three courses from the following list: PSYC 612, PSYC 622, PHTX 632, PHIS 501, PHTX 633 and approved special topics courses (PSYC 691).

**Developmental division curriculum**

PSYC 603, PSYC 636, and PSYC 671 or PSYC 690

- Three or more “age-stage” courses chosen from: PSYC 691 Infant Behavior and Development, PSYC 691 Early and Middle Childhood, PSYC 628 Psychology of Adolescent Development and PSCY 602 Psychology of Aging.
- One course in diversity (most often PSYC 677 Minority Mental Health).
- Two applied courses chosen from PSYC 691 Program evaluation, PSYC 700 Grant-writing, PSYC 795 Teaching of Psychology, PSYC/GRTY 642 Practicum in Clinical Geropsychology, PSYC/IDDS 600 Interdisciplinary Studies in Developmental Disabilities: Teamwork, PSYC/IDDS 692 Directed Studies in Developmental Disabilities, IDDS 691 Special Topics or other courses approved by adviser.
- Students will take one or more courses in psychopathology or disabilities, choosing from PSYC/GRTY 615 Aging and Mental Disorders, PSYC 616 Psychopathology, PSYC 650 Advanced Child Psychopathology, PSYC/IDDS 600 Interdisciplinary studies in Developmental Disabilities: Teamwork, PSYC/IDDS 692 Directed Studies in Developmental Disabilities, IDDS 691 Special Topics or other relevant classes as approved by adviser.
- Additional training in methodology or statistics: one or more courses selected from NURS 772 Advanced Qualitative Research, MGMT 643 Applied Multivariate Methods, MGMT/PSYC 702 Causal Analysis for Organizational Studies, SOC 605 Survey Research Methods, HADM 762 Health Services Research Methods II, BIOS 544 or other relevant courses as approved by adviser.
- One graduate course in social psychology is required.
Students specializing in life span development and gerontology must take the following set of gerontology courses in addition to other developmental and core requirements — these courses will result in a Certificate in Aging from the Department of Gerontology:

- GRTY 601 Biological and Physiological Aging
- GRTY 602 Psychology of Aging
- GRTY 605 Social Gerontology
- GRTY 692 Independent Study (two credits)
- Six additional hours of gerontology electives, chosen with adviser

**Electives**

Students, working with faculty, should choose additional courses as needed for their career goals; the number of electives taken is optional, and other courses not on this list may qualify, provided students work in consultation with faculty advisers:

- GRTY 601 Biological and Physiological Aging
- GRTY 602 Psychology of Aging
- GRTY 605 Social Gerontology
- HGEN 620 Introduction to Principles of Human Behavioral Genetics
- PSYC 613 Cognitive Development
- PSYC/GRTY 635 Psychology of Health and Health Care in the Elderly
- PSYC 638 Evolution of Psychological Systems
- PSYC 644 Individual Tests of Intelligence
- PSYC 645 Clinical Assessment of Child Disorders
- PSYC/GRTY 641 Survey of Psychological Assessment and Treatment of the Older Adult
- PSYC 655 Community Interventions: Development, Implementation and Evaluation
- PSYC 659 Seminar in Consultation Psychology
- PSYC 660 Health Psychology
- PSYC 691 Parenting or other special topics courses as available

**Social division curriculum**

PSYC 630, PSYC 632 and three courses from the following list:

- PSYC 604, PSYC 610, PSYC 633 and PSYC 634.

- A minimum of 72 semester hours of approved courses beyond the baccalaureate degree
Department of Sociology

The Department of Sociology offers programs leading to the degree of Master of Science and the Certificate of Applied Social Research. The goal of the graduate program in sociology is to facilitate the development of theoretical, methodological and substantive competence appropriate for students’ interests and career goals. In keeping with VCU’s role as an urban institution, the program focuses on the study of urban social problems, policy alternatives and strategies for change.

Graduate programs

Accelerated B.S.-M.S. program

Master of Science in Sociology

Post-baccalaureate Graduate Certificate in Applied Social Research
Accelerated Bachelor of Science and Master of Science in Sociology program

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 an overall 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 director of graduate studies 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 director of undergraduate studies before they have completed 90 credits. Both directors 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 director of graduate studies prior to registration.
Master of Science in Sociology

Admission requirements

In addition to the general requirements for admission to graduate programs in the Graduate School and in the College of Humanities and Sciences, the following requirements represent the minimum acceptable standards for admission:

- Applicants must submit a transcript of their undergraduate course work and the results of their GRE in general aptitude (quantitative, analytical and verbal).
- Admission priority is given to students with an undergraduate GPA of 3.0 or higher on a 4.0 scale. Students with GPA below 3.0 will be evaluated by the director of graduate studies and members of the graduate faculty on the basis of the GRE scores, recommendations from references and other data submitted by applicants.
- To be admitted as a regular graduate student, applicants should have completed 24 semester hours in the social sciences (including history), with at least 12 credits in sociology. Undergraduate work in sociology should include a survey of sociological theory, research methods and statistics. Students who otherwise are qualified for admission but lack this background may be admitted provisionally, with the stipulation that they may be requested to make up any deficiencies specified by the director of graduate studies.

Nondegree or “special” students must apply for regular student status after completing six sociology graduate credits.

Because of the diversity in different institutions of higher education, students trained abroad may be judged on an individual basis. Criteria on which this judgment is based include the reputation of the foreign university, the student’s academic record, proficiency in English and recommendations from professors. VCU requires that foreign students demonstrate guarantees of financial support.

A limited number of assistantships are available for qualified applicants. Applicants for assistantships should have their files complete by Feb. 15. Individuals not applying for assistantships should file their applications for graduate study as early as possible to permit adequate review and to ensure consideration. Applications that reach VCU after July 1 for the fall semester and after Nov. 15 for the spring semester may not be processed in time for registration.

Degree requirements

Two options are available for students pursuing a master’s degree in sociology. Students must receive approval from the director of graduate studies before choosing either option.

Thesis option

Thirty-six hours of graduate course work must be completed including the following core
courses: SOCY 502 Contemporary Sociological Theory, SOCY 601 Advanced Methods of Social Research, SOCY 602 Applications of Advanced Research Methods, and SOCY 608/STAT 608 Statistics for Social Research. A master's thesis will be developed under the guidance of the thesis committee (three faculty members including a thesis adviser) and must be defended publicly. The student may present up to six thesis credits for graduation. Up to six credits of independent study may be presented, as well as six credits outside the department.

**Concentration option**

Requirements are identical to the thesis option except for the following: (a) Students must complete 36 semester hours of course work; (b) Students must declare a concentration option prior to completing 28 hours of course work; (c) Students, in consultation with their advisers, will select an advisory committee (three faculty members including the adviser) that will develop an area of concentration consisting of 15 credits. Six of these credits may be taken prior to committee approval of the concentration area. Of the 15 hours, students may take up to nine credits outside the department, or six credits of independent study, provided the advisory committee approves. At no time should the combination of independent study hours and courses taken outside the department exceed nine hours. Students will receive certification of the concentration area by having it listed on their transcripts; (d) Students will submit to their advisory committee a "concentration area paper" that must demonstrate competence in the subject matter by reviewing literature and discussing prominent issues. Students must enroll for one credit of independent study while working on the concentration area paper. (A maximum of one credit of independent study for the purpose of writing the paper may be applied to the degree.)

For all candidates, an overall GPA of at least 3.0 ("B") must be maintained in order to receive a degree. A student who does not maintain a 3.0 average may be dropped from the master’s program at any time by the graduate program director. A review of all first-year graduate students will be conducted at the end of their second semester by the graduate program director and three appointed faculty members. The purpose of this review will be to assess all first-year students on their satisfactory/unsatisfactory progress toward the master’s degree.
The certificate program is designed (1) to enable practitioners to acquire additional knowledge and skills in applied social research without necessarily pursuing a graduate degree and (2) provide marketable job/career skills for graduate degree-seeking students in sociology as well as other graduate programs. Because the proposed certificate program involves a limited number of credit hours and coordinates with the type of statistics and methods courses offered in a number of graduate degree programs, it may be pursued simultaneously with such programs as sociology, social work, public administration, social policy and urban services. At the same time, individuals seeking more limited, specialized training may pursue the certificate independently.

Program admission and matriculation requirements

Students possessing a B.A. or B.S. degree and beginning level skills in statistics/research methods are eligible for admission into the certificate program. Relevant course or research experience will be considered in evaluating admission and substitution of courses. Equivalency tests are available for required courses in statistics and methods. No more than six hours of substitution or equivalency credit will be granted. An overall GPA of 3.0 is required for award of the certificate, and no more than one grade of "C" may be earned in the certificate program curriculum.

Certificate in applied social research curriculum

A total of 19 hours is required to earn the applied social research certificate. Four courses (12 credits) in statistics and research methods are required. In addition, two internship courses (four credits), which offer the opportunity for involvement in all phases of ongoing research projects, are required. One course (three credits) may be elected to develop more specialized types of research skills.

Required courses

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
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<tr>
<td>SOCY 601</td>
<td>Advanced Methods of Social Research</td>
<td>SOCY 320 and SOCY/STAT 508 or equivalent</td>
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<tr>
<td>SOCY 602</td>
<td>Applications of Advanced Research Methods</td>
<td>SOCY 601 and SOCY/STAT 608</td>
</tr>
<tr>
<td>SOCY 605/PADM 605</td>
<td>Survey Research Methods</td>
<td>SOCY 601, SOCY 602, and SOCY/STAT 608, or permission of instructor</td>
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<tr>
<td>SOCY 608/STAT 608</td>
<td>Advanced Statistical Methods</td>
<td>SOCY/STAT 508 or permission of instructor</td>
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<tr>
<td>SOCY 693</td>
<td>Applied Research Internship I</td>
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<tr>
<td>SOCY 693</td>
<td>Applied Research Internship II</td>
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Elective courses

SOCY 603 Seminar in Population Studies
SOCY 623 Causal Analysis
SWKD 729 Program Evaluation for Social Welfare Practice
SLWK 606 Social Welfare Policy, Community Planning and Organizational Practice II
SLWK 656 Social Planning II
MRBL 673 Marketing Research
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 and a Master of Science in Mathematical Sciences with a concentration in either operations research or statistics. 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. Students seeking more information or wishing to enter the certificate program should contact the Department of Statistical Sciences and Operations Research.

D’Arcy P. Mays
Associate Professor and Department Chair

Graduate program

Master of Science in Mathematical Sciences
Master of Science in Mathematical Sciences

A Master of Science in Mathematical Sciences is offered jointly by the Department of Mathematics and Applied Mathematics and the Department of Statistical Sciences and Operations Research. The Master of Science in Mathematical Sciences offers specializations in several possible areas, including applied mathematics, mathematics, operations research, statistics, statistical computing, applied computational mathematics, discrete structures and others.

Admission requirements

In addition to the general requirements for admission to graduate programs listed in the Graduate Studies at VCU section and the College of Humanities and Sciences section of this bulletin, the following requirements represent the minimum acceptable standards for admission:

- Thirty credits in undergraduate mathematical sciences, computer science or related areas of which at least 18 semester credits must represent upper-level courses.
- Three letters of recommendation pertaining to the student’s potential ability as a graduate student in mathematical sciences.
- General GRE scores required.

 Provisional admission may be granted when deficiencies exist. These deficiencies must be removed by the end of the first year of residence, or its part-time equivalent, when the student’s application will be re-examined. Courses that are remedial or designed to remove deficiencies will not be accepted for credit toward the fulfillment of the course requirements for the master’s degree.

M.S. in Mathematical Sciences program

The program offers maximum flexibility by allowing students, in consultation with their graduate committees, to design a course of study that will best develop competence in those areas most relevant to their scholarly and professional objectives. This program consists of a minimum of 30 semester credits of which at least 15 must be at the 600 level. Each student will select either the thesis or non-thesis option.

A student who chooses the thesis option has a choice of writing a research thesis or an expository thesis. A research thesis is one which, in the opinion of the student’s thesis adviser and thesis committee, contains significant original research.
Students who choose to specialize in operations research or statistics with the thesis option may count six credits of STAT 698 or OPER 698. Otherwise, a student may write an expository thesis. For this type of thesis, the student may count three credits of STAT 698 or OPER 698. The student who elects the non-thesis option must pass a written examination and may be asked to take an oral examination. Note that the following courses may not be applied to the credit requirements for the M.S. in Mathematical Sciences: STAT/SOCY 508, SOCY 543, STAT/BIOS/PMCH 543 and STAT/SOCY 608.

### Non-thesis option

<table>
<thead>
<tr>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Mathematical sciences (including both semesters of a 600-level sequence)</td>
</tr>
<tr>
<td>6-9</td>
<td>Mathematical sciences or allied field*</td>
</tr>
<tr>
<td>2-5</td>
<td>Research seminar credits**</td>
</tr>
<tr>
<td>0-3</td>
<td>Directed research credits**</td>
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### Thesis option

<table>
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<tr>
<th>Credits</th>
<th>Description</th>
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<tbody>
<tr>
<td>18</td>
<td>Mathematical sciences (including both semesters of a 600-level sequence)</td>
</tr>
<tr>
<td>6-9</td>
<td>Mathematical sciences or allied field*</td>
</tr>
<tr>
<td>3 or 6</td>
<td>Thesis credits</td>
</tr>
<tr>
<td>1-3</td>
<td>Research seminar credits**</td>
</tr>
<tr>
<td>0-3</td>
<td>Directed research credits**</td>
</tr>
<tr>
<td><strong>30</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Courses selected from an allied field must be approved by the department’s Graduate Affairs Committee.

** The student who chooses the non-thesis option may receive a maximum total of four credits for MATH 690 Research Seminar and MATH 697, OPER 697 or STAT 697 Directed Research. The student who chooses the thesis option usually will not take directed research, but he or she is not prohibited from doing so. In the thesis option, a total of seven credits for thesis, research seminar and directed research is the maximum credit permitted.

### Specializations

Students may obtain a designation on their transcripts indicating that their graduate study has emphasized one of the following graduate concentrations by completing the requirements that are listed here for that concentration. A student who has not satisfied the requirements for one of these concentrations, but who has otherwise fulfilled all the requirements for a master’s degree, will be awarded a degree of Master of Science in Mathematical Sciences without any specialization.

### Master of Science in Mathematical Sciences with a concentration in applied mathematics

MATH 517, 518*; a six-credit sequence selected from MATH 617-618, 619, 620, 621 and at least six credits selected from MATH 511, 512, 515, 516, 527-528, 615, 689, STAT 513-514. Also, at least one seminar and the thesis (if chosen) must concern topics of applied mathematics.
Master of Science in Mathematical Sciences with a concentration in mathematics

MATH 507, 508*; a six-credit sequence selected from 601-602, 603-604, 607-608, 611-612, and at least three credits from MATH 505, 509, 510, 521, 525 or any otherwise uncounted 600-level course for this concentration. Also, at least one seminar and the thesis (if chosen) must concern topics of pure mathematics.

Master of Science in Mathematical Sciences with a concentration in operations research

OPER 527-528, STAT 541; two courses selected from OPER 631, 641, 643, 645, 647, STAT 613, 614, 648, 649, or approved OPER 691 and/or STAT 691 and at least one two-course sequence selected from (1) STAT 643 and 644, (2) STAT 642 and one of 623, 626, 643, 645, (3) CMSC 508 and 608, (4) INFO 610 and 614. Also, at least one seminar and the thesis (if chosen) must concern topics of operations research.

Master of Science in Mathematical Sciences with a concentration in statistics

STAT 513, 514* and nine additional credits in statistics courses, including at least six credits in 600-level statistics courses. Three of the 600-level credits must be selected from STAT 613-614, STAT 645 or STAT 691** and three credits from STAT 623, STAT 626, STAT 644 or STAT 691.** Also, at least one seminar and the thesis (if chosen) must concern topics of statistics.

* If a student previously received credit for one or both of these courses or their equivalent, then one or two of the other courses mentioned for this concentration must be taken as substitute(s) to satisfy the minimum requirement of 15 credits of course work in the concentration.

** Use of STAT 691 to meet this requirement must be approved by the Department of Statistical Sciences and Operations Research and the Graduate Affairs Committee of the department at the time the course is scheduled.
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. A program for nurse anesthesia was inaugurated as a separate department in 1969; an existing educational program in occupational therapy was transferred administratively to the School of Allied Health Professions in 1970, and a teaching program in patient counseling formerly based within MCV Hospitals was integrated with the school, also in 1970. A doctor of philosophy program in health services organization and research, the first doctoral program for the School of Allied Health Professions, was introduced in 1982. In 1985, the existing Department of Gerontology was transferred administratively to the School of Allied Health Professions. In June 1988, an executive master's program in health administration was introduced. An entry-level master's degree professional program in physical therapy was initiated for students matriculating in August 1989. On July 1, 1994 the Department of Rehabilitation Counseling was transferred from the School of Community and Public Affairs to the School of Allied Health Professions. A distance-learning, interdisciplinary doctoral program — the Ph.D. in Health Related Sciences — began accepting students in the fall 1998 semester. This program was developed in response to the national demand for doctorally prepared faculty and practitioners in the allied health professions. Recent program developments include the initiation of an entry-level master's degree program in occupational therapy and the subsequent closure of their undergraduate program (1998); the initiation of a Master of Science degree offering in the Department of Patient Counseling (2000); the start of a joint degree program, the M.D./M.H.A., offered by the Department of Health Administration and the School of Medicine (2001); and the initiation of the professional doctor of physical therapy degree (2002).
Programs

Both entry- and advanced-level professional, graduate and certificate programs are offered by the School of Allied Health Professions. Graduate programs in 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**

Master of Science

**Department of Gerontology**

Master of Science

**Department of Health Administration**

Master of Health Administration

Master in Health Administration and Juris Doctor degrees cosponsored by the T. C. Williams School of Law at the University of Richmond

Master of Science in Health Administration (Professional M.S.H.A. Program – Online)

Ph.D. in Health Services Organization and Research

Doctor of Medicine and Master of Health Administration degrees cosponsored by the School of Medicine

**Department of Nurse Anesthesia**

Master of Science in Nurse Anesthesia

**Department of Occupational Therapy**

Master of Science in Occupational Therapy

Master of Science

**Program in Patient Counseling**

Master of Science

**Department of Physical Therapy**

Ph.D. in conjunction with the departments of Anatomy or Physiology

Ph.D. in Rehabilitation and Movement Science

**Department of Rehabilitation Counseling**

Master of Science

Master of Science in Rehabilitation Counseling and certificate in aging studies

Professional certificate programs currently are offered by the following departments and programs.

**Department of Gerontology**

Certificate in aging studies
Certificate in aging studies and Master of Social Work (jointly with the School of Social Work)

Program in Patient Counseling
Postgraduate certificate in patient counseling
Joint Master of Science in Patient Counseling and Master of Divinity
  with the School of Theology at Virginia Union University
  and the Baptist Theological Seminary in Richmond

Department of Rehabilitation Counseling
Postgraduate certificate in professional counseling

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.

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.

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.

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.

Graduate programs

Graduate degree and certificate program offerings in the School of Allied Health Professions are designed as basic professional or advanced-level programs. Accreditation requirements for the individual programs preclude the establishment of general admission prerequisites, registration dates, and course and degree requirements beyond those of the Graduate School.

It is the intent that these regulations and procedures for each program ensure the selection of applicants whose motivation, ability, character and health status qualify them to pursue graduate study successfully. Specific information may be found in the departmental presentations in this section or are available from departmental graduate coordinators.

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.

The suitability of student performance and behavior relating to these professions and to the consumers of health care is a paramount concern of the administration and faculty of this school. To assure a quality of educational and clinical preparation for its graduates, the following statement is promulgated:

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.
Ph.D. in Health Related Sciences

Overview

The Doctor of Philosophy Program in Health Related Sciences in the School of Allied Health Professions was designed as a distance learning program with the cooperation and commitment of the nine departments of the school: Clinical Laboratory Sciences, Gerontology, Health Administration, Nurse Anesthesia, Occupational Therapy, Patient Counseling, Physical Therapy, Radiation Sciences and Rehabilitation Counseling.

The mission of the School of Allied Health Professions is to serve as an international leader in the education of excellent, innovative and responsible allied health professionals. Educational formats that are technologically advanced and accessible to students through on-campus and distance learning are emphasized throughout all programs in the school. In addition, the school promotes excellence in health care service and encourages collaborative research that generates state-of-the-art and specialized knowledge.

This doctoral program involves a four-year course of study. It is designed to meet the critical need for doctorally prepared allied health professionals across the nation, specifically in the areas of teaching, research and administration. The departments of the School of Allied Health Professions offer a doctoral curriculum with a common interdisciplinary core of courses and eight specialty tracks germane to the disciplines of the participating departments. The ninth department of the school is Patient Counseling. This department is participating by teaching the course in ethics as part of the doctoral program.

Program instructional goals

The goal of the doctoral program in health related sciences is to provide experienced health professionals with advanced knowledge and skills so that they may assume positions in teaching, research and administration upon graduation. This doctoral program emphasizes both an interdisciplinary and multimedia focus, drawing from resources across the university. The overall objectives of this doctoral program are to produce scholars who have:

- the ability to understand, analyze, design, execute and evaluate research and practice in the allied health sciences, with particular in-depth understanding in the chosen area of specialization,
- the ability to translate research knowledge and principles into applied practice perspectives and skills,
- the ability to teach the current principles and content of the allied health sciences,
- the ability to do research, practice and teach in the area of interdisciplinary health care.
● the ability to continually examine current and future changes in the allied health disciplines from an interdisciplinary perspective,

● a demonstrated knowledge and understanding of professional and ethical responsibility and conduct in the allied health professions, and

● a demonstrated knowledge and understanding of ethnic issues and cultural diversity in health care delivery and health policy.

Facilities

The administrative offices for the program are located on the MCV Campus, at 1200 E. Broad St. (West Hospital, First Floor, East Wing). The program's state-of-the-art computer laboratory is located in Tompkins-McCaw Library, at 509 N. 12th St.

Program admission

Admission criteria

Admission to the program, which is open to students with clear career goals in the health related sciences, is limited and competitive. Therefore, work experience in a health-related field is encouraged.

Applicants to the program must meet the following admission criteria:

● have an earned master's degree in an academic or allied health-related field from an accredited college or university,

● have a minimum cumulative GPA of 3.3 on their master's-level work,

● have completed a graduate course in statistics with a grade of "B" or better,

● have earned a minimum combined score of 1100 on the verbal and quantitative sections of the Graduate Record Exam (GRE) or a minimum score of 55 on the Miller's Analogies Test (MAT). Tests must have been taken within the past five years,

● when applicable, have a minimum Test of English as a Foreign Language (TOEFL) score of 600,

● demonstrate a record of professional competency and success, and

● articulate clear professional and educational goals and written communication skills through the submission of a written essay.

Enrollment in the program is open to qualified persons without regard to age, race, sex, religion, disability or national origin. Admission requirements are in compliance with all applicable federal and state statutes, orders and regulations, and university guidelines.

Admission procedures

Prior to reviewing an application for admission, the program must receive:

● a completed application form from the applicant, including:

   ○ three letters of recommendation, two of which preferably are from sources qualified to assess the candidate's academic potential,
• a written essay that discusses career goals and the manner in which this doctoral
program will enhance those goals, and what the applicant expects to contribute to
this program, and
• a curriculum vitae;

  • official transcripts indicating completion of baccalaureate and master’s degrees (or
equivalent) from an accredited college or university, and
  • GRE or MAT scores.

Incomplete packages may not be reviewed. Materials are sent to the Graduate School for
processing and then forwarded to the School of Allied Health Professions. Once received in the
school, the application is reviewed for completeness. Applicants with incomplete files will be
contacted regarding the missing materials. Incomplete files will be held in the director’s office
until all materials are received.

Completed folders will be sent to the respective departmental representative of the School of
Allied Health Professions Doctoral Program Advisory Committee (D-PAC). Departments will then
rank qualified applicants and, based on a review of the file, a personal interview will be
scheduled at the department’s discretion for their top candidates. Following the departmental
ranking, all files will be returned to the director’s office.

The D-PAC will meet to select and recommend the incoming class, and to develop an alternate
list (total applicant pool ranked by qualifications). The director and the dean of the School of
Allied Health Professions are responsible for the final decision.

Applicants will be notified by the dean of the Graduate School regarding the admission decision
and of the deadline for their acceptance of the offer and holding fee.

Part-time status

The program will be open to part-time students, although students are encouraged to enroll full
time.

Advising

Upon admission to the program, students will be assigned an interim adviser to guide them
through the core courses and assist them as they consider their area of research. All program
advisers will have an earned doctorate and be a member of the university’s graduate faculty.

Students may change their interim adviser as their programs of study and interests evolve, if
approved by the program director. Although discouraged, some students may wish to switch
their area of specialization (changing from the department through which they were initially
admitted to the program.) Students who want to change specialization areas must petition the
doctoral program director. The petition must be approved by the program director, the D-PAC
and the appropriate department chair. There is no guarantee that the applicant will be accepted
into the new specialization area.

After successful completion of the comprehensive examinations, students will choose a
dissertation chair who will serve as adviser and guide them through their research/dissertation process.

Program continuation and completion requirement

Continuation requirements

After admission to the Ph.D. program, the student must maintain a minimum cumulative GPA of 3.0 in all course work completed at VCU. A student who falls below that minimum will have one semester to remedy the deficiency. Even with an overall GPA of 3.0 or better, a student may earn no more than two (six credit hours) grades of "C." A student who receives a grade of "D" or "F" will be reviewed for continuation in the program by the department of their specialization.

Students must register for at least one credit hour each fall and spring semester for continuation in the program. A student who fails to register must have advance approval to do so or will be dropped automatically from the program and must reapply for reinstatement. The maximum time to complete all of the requirements for the degree is seven calendar years from the date of entry into the program.

Course transfer or waiver

A maximum of 25 percent of the course work other than research may be transferred from another VCU program or outside institution and applied toward the Ph.D. course requirements. Transfer and waiver credit is given at the discretion of the program director after consultation with appropriate faculty members, subject to university approval. Courses taken as requirements for other degrees are not transferable. A waiver may be warranted if an equivalent course was taken. However, another course must be substituted for the waived course in order to fulfill the requisite credit hours needed for degree completion.

Comprehensive examination

The purpose of the comprehensive examination is to provide a vehicle through which students can demonstrate the ability to integrate their educational experience by adequately addressing complex questions pertinent to the current and developing knowledge of the allied health fields. Students are eligible to take each of the two comprehensive examinations upon successful completion of the appropriate core course work. Exams must be taken within six months of completing each core.

Two written examinations will be administered, one for the common interdisciplinary core and one for the research methods core. A three-member graduate faculty committee will develop and administer each exam. This committee will be made up of two members of the Core Advisory Committee and one member appointed by the program director. Each exam will be offered once in the fall semester, and once in the spring semester. Prior to completion of the semester in which the student becomes eligible to take each exam, he/she must submit a formal statement of intent to the program director.

Students who receive a failing grade on their initial attempt will have one opportunity to repeat each comprehensive examination. Failure to pass an exam on the second attempt will result in
termination from the program.

**Program completion requirements**

The doctor of philosophy degree is awarded after (1) the minimum 51 credit hours of course work are completed; (2) comprehensive exams are passed; and (3) either a dissertation is written and defended orally, or three first-author articles of publishable quality on research undertaken by the doctoral candidate once enrolled in the program are written and defended orally. The journal articles will be scrutinized for quality of scholarship by an internal research committee headed by the student’s research adviser. All three articles must be approved by the internal research committee prior to submission.

**Curriculum structure**

The proposed curriculum is designed to take four years to complete. Students spend the first two and one-half years (six-month-long semesters) completing course work. The final year and one-half is spent developing the doctoral dissertation. Research components are present in each year of the program and a research emphasis is present throughout the entire curriculum. The student is required to designate the area of intended research in her/his specialization area in the first year.

Each of the five course-work semesters is composed of both on- and off-campus components. On-campus sessions, scheduled during the end of June and beginning of July, and the end of December and beginning of January, will employ a rather traditional mix of educational technologies (e.g., lectures, seminars and assigned reading). During the off-campus component of each semester, students pursue their studies employing a wide variety of innovative educational technologies (e.g., computer conferencing, computer-aided instruction, videotape packages and programmed instructional material), in addition to assigned readings and the completion of various assignments and projects. Upon completion of the five semesters of course work, students are required to return to campus each semester until a research proposal has been developed and successfully defended.

The program curriculum consists of a total of 51 credit hours (18 credits of common interdisciplinary core courses, 12 credits of research methods core courses, nine hours of specialty track courses and 12 hours of dissertation research). The courses, arranged by focal area are:

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>credits</th>
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<tbody>
<tr>
<td>ALHP 701 Health Services Delivery Systems</td>
<td>3</td>
</tr>
<tr>
<td>ALHP 712 Multimedia Technology and Curriculum Design for Health Care Professionals</td>
<td>3</td>
</tr>
<tr>
<td>ALHP 760 Biostatistical Methods for Health Related Sciences</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Semester 2</th>
<th>credits</th>
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</thead>
<tbody>
<tr>
<td>ALHP 702 Finance and Economic Theory for Health Care</td>
<td>3</td>
</tr>
<tr>
<td>ALHP 761 Health Related Sciences Research Design</td>
<td>3</td>
</tr>
<tr>
<td>ALHP 762 Multivariate Statistical Methods for Health Related Sciences Research</td>
<td>3</td>
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<tr>
<td>Semester 3</td>
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<tr>
<td>ALHP 718 Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>ALHP 763 Clinical Outcomes Evaluation for Health Related Sciences</td>
<td>3</td>
</tr>
<tr>
<td>ALHP 781 Doctoral Seminar in Health Related Sciences</td>
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<tr>
<td>Methods Comprehensive Exam</td>
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<tr>
<th>Semester 4</th>
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<tr>
<td>ALHP 708 Ethics and Health Care</td>
<td>3</td>
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<tr>
<td>ALHP 716 Grant Writing and Project Management in Health Related Sciences</td>
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<tr>
<td>ALHP 890 Dissertation Seminar</td>
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<tr>
<td>Core Comprehensive Exam</td>
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<th>Semester 5</th>
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<td>ALHP 792 Independent Study</td>
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<tr>
<td>ALHP 793 Research Practicum</td>
<td>3</td>
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<tr>
<td>ALHP 899 Dissertation Research</td>
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<table>
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<tr>
<th>Semester 6</th>
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<tbody>
<tr>
<td>ALHP 899 Dissertation Research</td>
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<table>
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<tr>
<th>Semester 7</th>
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<tbody>
<tr>
<td>ALHP 899 Dissertation Research</td>
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<table>
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<tr>
<th>Semester 8</th>
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<tbody>
<tr>
<td>ALHP 899 Dissertation Research</td>
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</table>

Note: All three of the specialty track courses and the dissertation research courses are taken in one of the following areas, and each of the departments have curricular section numbers for each of the respective courses (ALHP 781, ALHP 792, ALHP 793 and ALHP 899):

- Section 001 Clinical Laboratory Sciences
- Section 002 Gerontology
- Section 003 Health Administration
- Section 004 Nurse Anesthesia
- Section 005 Occupational Therapy
- Section 006 Physical Therapy
- Section 007 Radiation Sciences
- Section 008 Rehabilitation Counseling

**Dissertation and published research requirements**

**Admission to candidacy**

Students are eligible to begin their dissertation upon written certification by the program director that all predissertation/research requirements, including the comprehensive examinations, have been satisfied and that the student is prepared to proceed with the dissertation/research project. Copies of the certification will be forwarded to the student, the student’s formal program adviser and the dean of the School of Allied Health Professions. After admission to candidacy, students will proceed to propose, complete and defend their dissertation or three journal articles research requirement.
Enrollment requirement

Students are required to maintain continuous enrollment in ALHP 899 Dissertation Research until completion of the requirements, including the defense process. A minimum of three credit hours per semester are required until nine credits are accumulated, after which only one credit per semester is required unless otherwise specified by the student’s dissertation chair.

Dissertation/research committee

After successful completion of the comprehensive exam, the student nominates a dissertation/research committee and the dissertation/research director submits the nominations in writing to the program director. Such committees will consist of a minimum of four graduate faculty members, one of whom will be outside the student’s specialty track. The program director will provide written approval of the dissertation/research committee and clear such appointments with the appropriate administrative officials.

Dissertation/research standards

The dissertation or publishable research articles must represent independent research and should be based on an original research question or hypothesis. Generally, dissertations or publishable research articles will demonstrate the student’s ability with empirical research, adhering to canons of (1) logic in conceptualization and design, (2) valid and reliable measurement, (3) appropriate analytic technique and (4) appropriate interpretation of results. Studies should be based on a formal theoretical or conceptually explicit framework for investigating a question or testing a hypothesis relevant to the allied health field.

Tuition and fees

Graduate tuition and fees will be assessed in accordance with rates approved annually by the VCU Board of Visitors. In addition to tuition, a program-specific fee is assessed for this distance-learning program. Tuition and fees include all direct program costs and the use of the university’s computing systems. An additional fee may be charged for learning materials distributed during a course.

Computer requirements

Students are encouraged to have a working knowledge of Word for Windows 95. All students must have access to a contemporary IBM-compatible personal computer equipped with a printer and a 28.8 baud modem. Although students can use a personal computer at the office, it is strongly recommended that they have one at home.

Financial aid

Students must apply directly to the financial aid office for consideration. In addition, when other support is available to students, all will be notified of the eligibility criteria and application procedures.
Due process

All appeals to decisions based on this document are made to the program director. In the event that satisfactory resolution is not attained, the next level of appeal is the dean of the School of Allied Health Professions. Students in the program are governed by the School of Allied Health Professions Student Academic Appeal Policy and Procedures document, which was developed in compliance with university guidelines. Exception to any of the policies and procedures identified in this document require the written consent of the program director and, when necessary, the dean of the school.
School of Allied Health Professions

Department of Clinical Laboratory Sciences

History

The graduate program leading to a Master of Science in Clinical Laboratory Sciences was started in 1967 to provide advanced education for certified medical technologists/clinical laboratory scientists.

The program was modified in 1981 to accept part-time students and again in 1985 to allow candidates holding a degree in another area of science to obtain graduate education in clinical laboratory sciences. In 2003, the accelerated track, which integrates undergraduate and graduate course work with the subsequent awarding of a Bachelor of Science and Master of Science degree simultaneously, was added.

Philosophy

The Department of Clinical Laboratory Sciences supports the philosophy and mission of the university and the School of Allied Health Professions. The departmental graduate program is dedicated to enhancing and promoting clinical laboratory science. By providing advanced theoretical and technical education, the 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.

Facilities

The Department of Clinical Laboratory Sciences is located in the Randolph-Minor Annex Building 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.
Master of Science in Clinical Laboratory Sciences

Objectives

The objectives of the Department of Clinical Laboratory Sciences master’s program are to:

- provide the student with a superior, yet flexible, course of advanced study in clinical laboratory sciences,
- prepare the student to critically evaluate the literature related to laboratory issues and to produce future advances within laboratory sciences,
- foster the continued development of interpersonal communication skills and ethical principles,
- develop and promote strategies for lifelong learning and encourage continued professional growth through research, education and active participation in professional societies, and
- provide society and the commonwealth of Virginia with a source of highly competent professional laboratorians capable of functioning effectively in leadership roles within the field of clinical laboratory sciences.

Financial aid

Students must apply through the financial aid office for assistance. Refer to the general section on financial aid in this bulletin for details of the programs available. In addition, there are limited funds from departmental and professional sources. When this support is available, all students will be notified of the eligibility criteria and application procedures.

Admission requirements

In order to meet the needs of all individuals interested in continuing their education in the field, the Department of Clinical Laboratory Sciences has modified its graduate curriculum to accommodate a diversified group of candidates, including full- and part-time students. The program is highly flexible, allowing students to select course work that meets their specific needs once the basic program requirements have been met.

The general entrance requirements for the Master of Science in Clinical Laboratory Sciences (for the Advanced and Categorical tracks) are:

- baccalaureate degree from an accredited college or university with a major in: clinical laboratory sciences (medical technology for the advanced track; biology or chemistry for the categorical track),
- minimum undergraduate GPA of 2.7 on a 4.0 scale for at least the last two years of undergraduate work,
The entrance requirements for the Master of Science in Clinical Laboratory Sciences — accelerated track are:

- acceptance into the B.S. degree program in clinical laboratory sciences,
- completion of 54.5 hours of CLLS professional courses with a minimum GPA of 2.7 and
- GRE scores.

**Guaranteed admission**

VCU students participating in the University Honors Program may apply for guaranteed admission to the Master of Science in Clinical Laboratory Sciences program. Refer to the general section on admissions through honors in this bulletin for details of the program.

The Department of Clinical Laboratory Sciences also has agreements for guaranteed admission into the Master of Science program with the following institutions: Averett University, Eastern Mennonite University, Ferrum College, George Mason University, Hollins University, Mary Baldwin College, Radford University and Roanoke College in Virginia, and Meredith College in North Carolina. The requirements for guaranteed admission are:

- baccalaureate degree from an accredited college or university with a major in clinical laboratory sciences (medical technology), biology or chemistry,
- minimum overall undergraduate GPA of 3.25 and a minimum undergraduate science GPA of 3.0 on a 4.0 scale,
- minimum TOEFL of 570 for international students whose native language is not exclusively English and
- recommended, but not required, are two letters from employers or recent instructors addressing academic potential.

GRE is waived for admission decisions. The GRE must be taken within the first enrolled year, but the results are to be used for record keeping purposes only.

**Transfer credit**

Students who have earned graduate credit before entering the Department of Clinical Laboratory Sciences’ master’s program may be permitted, at the discretion of the faculty, to transfer a maximum of six semester hours of credit toward the Master of Science degree. Transfer credit may be allowed when, in the judgment of the faculty, the applicants have satisfactorily completed course work equivalent to requirements of the graduate curriculum in this department.

**Program options**

The department offers three tracks in the master’s degree program in clinical laboratory sciences:
Advanced Master's Track in Clinical Laboratory Sciences

Students holding a baccalaureate degree in clinical laboratory sciences/medical technology and generalist certification by the National Credentialing Agency for Laboratory Personnel Inc. or the Board of Registry of the American Society for Clinical Pathology are eligible for the advanced master's track. Candidates may specialize and complete a project or thesis in clinical chemistry, hematology, microbiology, immunohematology, molecular diagnostics or immunology. In addition to the basic science requirement, each student will choose an area of secondary emphasis in biomedical research, education, management or business.

Categorical Master’s Track in Clinical Laboratory Sciences

The categorical master's track is designed for students with a baccalaureate degree in biology or chemistry. This track provides specialized study, including a clinical practicum, in one of the following areas: clinical chemistry, hematology, microbiology or immunohematology. A project or thesis is required. Upon completion of the curriculum, students are eligible to take a national certification examination in the area in which they performed their concentrated study.

Application forms and instructions for applying to all graduate programs are available on the Graduate School Web site.

Curriculum for Advanced and Categorical master’s tracks

Students in the Advanced Master’s and Categorical Master’s track are required to complete a minimum of 34 semester hours to include:

| Discipline-specific science             | 15-19 |
| Seminar                                | 3     |
| (4 recommended)                        |
| Education, management or business      | 3     |
| Computer applications or statistics    | 3     |
| Scientific inquiry                     | 2     |
| Research                               | 4-6   |

Specific courses will depend on the individual candidate’s choice of specialty. The basic science requirement may be distributed among approved courses listed in this bulletin.

Students with a secondary emphasis in education, management or business may elect to focus on courses in those areas in lieu of the discipline-specific course work. No more than 14 credit hours in the area of secondary emphasis may be applied toward the total minimum requirement.

Categorical master’s candidates are required to complete a six-week clinical practicum in their specialty area.
A research study in the form of a thesis or project is required. Students selecting the thesis option complete a minimum of 15 semester hours of discipline-specific sciences and six hours of research; students selecting the project option complete 19 semester hours of discipline-specific sciences and four hours of research.

Full-time candidates require a minimum of two academic years to complete the program. There are no full-time residence requirements. Part-time students must complete all work requirements within five years. An interruption in registration in excess of one semester requires prior approval of the department.

**Accelerated Master’s Track in Clinical Laboratory Sciences**

The accelerated master’s track integrates graduate and undergraduate coursework and leads to the awarding of a B.S. and M.S. degree simultaneously. The student must complete a minimum of 114.5 undergraduate credit hours including 60 prerequisite credit hours (see admission requirements for the baccalaureate degree program in Clinical Laboratory Sciences in the Undergraduate Bulletin for a list of the specific courses) and 54.5 credit hours of professional coursework in clinical laboratory sciences. A minimum cumulative GPA on CLLS courses of 2.7 and completion of the GRE are required for admission into the graduate portion of the program. The candidate must complete at least 40 additional hours of graduate-level course work. Upon completion of the curriculum students are eligible to take the national certification examinations for a CLS/MT generalist. Students pursuing the Accelerated Master’s track must initially qualify for admission to the Bachelor of Science in Clinical Laboratory Sciences program. Application materials may be obtained by writing to the Office of Undergraduate Admissions, Virginia Commonwealth University, P.O. Box 980583, Richmond, VA 23298-0583 or from the Web at http://www.sahp.vcu.edu/cls.

**Curriculum for the Accelerated Master’s track**

<table>
<thead>
<tr>
<th>Prerequisite requirement</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 hours of course work prior to entrance into the Bachelor of Science program in clinical laboratory sciences (see the VCU Undergraduate Bulletin for details of the required courses)</td>
<td>60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional studies requirement — Undergraduate</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLLS 301-302 Hematology</td>
<td>7.5</td>
</tr>
<tr>
<td>CLLS 303 Parasitology</td>
<td>1.0</td>
</tr>
<tr>
<td>CLLS 304 Clinical Microscopy</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 Microbiology</td>
<td>5.0</td>
</tr>
<tr>
<td>CLLS 310 Clinical Immunology</td>
<td>4.5</td>
</tr>
<tr>
<td>CLLS 311-312 Biochemistry</td>
<td>8.0</td>
</tr>
<tr>
<td>CLLS 314 Clinical Instrumentation</td>
<td>3.0</td>
</tr>
<tr>
<td>CLLS 337 Clinical Education</td>
<td>1.0</td>
</tr>
<tr>
<td>CLLS 483 Biochemistry Practicum</td>
<td>3.0</td>
</tr>
<tr>
<td>CLLS 485 Hematology Practicum</td>
<td>3.0</td>
</tr>
</tbody>
</table>
CLLS 493 Clinical Microbiology Practicum 3.0  
CLLS 494 Miscellaneous Clinical Practicum 3.0  
CLLS 496 Blood Bank Practicum 3.0  

54.5

**Professional studies requirement – Graduate**

- CLLS 580 Education/Management 3.0  
- BIOS 543 Statistical Methods I 3.0  
- ACCT 507 Fundamentals of Accounting 3.0  
- Education/Management/Business Electives 3.0  
- CLLS 600 Advanced Concepts in Clinical Laboratory Sciences 3.0  
- Discipline Specific Sciences 6.0  
- CLLS 690 Clinical Laboratory Sciences Seminar 1.0  
- OCCT 710 Research Process in Occupational Therapy 3.0  
- CLLS 790 Research in Clinical Laboratory Sciences 3.0  
- Electives 12.0  

40

Full-time candidates require a minimum of five academic years to complete the program. There are no full-time residence requirements. Part-time students must complete all graduate-level requirements within five years. An interruption in registration in excess of one semester requires prior approval of the department.
Department of Gerontology

History

The Department of Gerontology was founded in 1976. The Master of Science in Gerontology, as well as a postgraduate Certificate in Aging Studies, is offered. The Department of Gerontology became a part of the School of Allied Health Professions in January 1985. As part of the department, the Geriatric Education Center was established Oct. 1, 1985. This center is a multidisciplinary effort involving cooperation of all the health-related professional schools and the College of Humanities and Sciences; the major focus is to promote education in geriatrics and gerontological health care.

Philosophy

The basic philosophy of the department is to improve the overall well-being of elderly persons through the development of educational programs that are responsive to the changing psychological, physical, social and political needs of our elderly population. Research, community service and continuing education in gerontology and geriatrics are integral parts of this educational effort.

Objectives

The purpose of this program is threefold: (1) to train qualified professionals to work in administrative, planning, service delivery and instructional and staff development positions in programs and services for the elderly at the national, state and local levels, (2) to provide an opportunity for those studying in other disciplines, and whose work will encompass service to the aged, to integrate their own training with a comprehensive knowledge and understanding of the aging process and (3) to stimulate the design and execution of gerontological research across the multiple disciplines.

Facilities

Offices of the Department of Gerontology are located in the Randolph Minor Annex, 301 College St. Facilities for the Psychophysiological and Pain Research Laboratory and the Virginia Geriatric Education Center are housed in the basement of the Lyons Building, 520 N. 12th St.
Virginia Center on Aging

The Virginia Center on Aging, established at VCU by the Virginia General Assembly in 1978, is a statewide resource for aging-related research, education, service, training and technical assistance. It serves as a focal point for the collection, assessment and maintenance of data on elders in the commonwealth; designs and tests innovative demonstration projects in education and service delivery; and assists public and private organizations in meeting the needs of older citizens.

The Virginia Center on Aging and the Department of Gerontology maintain the Information Resources Center, a broad collection of print and audiovisual materials on aging that is available on loan. Short reports and training manuals may be obtained at cost. The Virginia Center on Aging also administers the Alzheimer’s and Related Diseases Research Award Fund that provides seed grants of $25,000 each to researchers in Virginia in order to investigate biomedical, psychosocial, clinical, public policy and other aspects of dementing illness.

The Virginia Center on Aging regularly partners with other units of VCU in developing, conducting and evaluating research and training projects related to aging, disabilities, lifelong learning and health problems.

Honors and awards

A. D. Williams Award

An annual award is made to a student who demonstrates by virtue of high scholastic attainment and professional competence unusual promise and ability in the field of gerontology.

Gerontology student of the year

Each year the faculty chooses a graduating student who has exhibited outstanding scholastic achievement and demonstrated service in gerontology.

Distinguished Alumni Award

Each year the departmental faculty chooses an alumna/alumnus who best exemplifies the standards of the profession.

Iris A. Parham Award and Scholarship

The Iris A. Parham Scholarship was created by alumni in honor of Dr. Iris A. Parham and the Department of Gerontology’s 25th anniversary. This award is given to a candidate who has demonstrated distinguished academic performance, outstanding achievement in and dedication to the field of gerontology, and has overcome obstacles or met significant challenges to pursue a career in aging studies.

Programs

Eight courses of study are offered:
- a Master of Science in Gerontology degree with a concentration in one of the following six tracks: education, health care organization and planning, psychogeriatrics, public administration, social services, or research
- a Master of Science in Physical Therapy with a specialty in geriatric physical therapy, offered jointly with the Department of Physical Therapy
- a combination of the Certificate in Aging Studies program and a Master of Social Work degree, offered jointly with the School of Social Work
- a Certificate in Aging Studies program to meet the needs of persons working with the elderly, but who have no academic training in gerontology
- a combination of the Certificate in Aging Studies with the Doctor of Pharmacy degree, offered with the School of Pharmacy
- a combination of the Certificate in Aging Studies and a Master of Science in Rehabilitation Counseling offered jointly with the Department of Rehabilitation Counseling
- a combination of the Certificate in Aging Studies and the Post-professional Master’s Program in Occupational Therapy
Master of Science in Gerontology

The gerontology curriculum is a multidisciplinary program established in 1976 which offers the Master of Science degree. The program utilizes professional assistance from departments on both campuses.

There are six concentration areas in gerontology:

**Education track**

This area of concentration is designed for students interested in teaching or training careers in gerontology. Students electing this track will be prepared to provide instruction to university or community college students, the lay public, professional service providers, and older people.

**Health care organization and planning track**

(In conjunction with the Department of Health Administration.) Upon completing this track, students will have a foundation of knowledge in health care organization, health planning, health policy and a macro perspective on the financing of health care. In addition, students will have developed skills in policy analysis and the use of economic tools. Finally, students will broaden their understanding of the political, legal and ethical issues involved in health care organization and planning.

**Psychogeriatrics track**

This area of concentration, developed jointly with the Department of Psychology, is designed for students interested in working with those older adults and their families who are experiencing psychological difficulty. Students electing this track will be prepared to provide assistance directly to the elderly and their families as well as to consult and train professionals and paraprofessionals to provide more effective mental health services. Training is provided through a combination of specialized didactic instruction and structured field experience in providing direct services, consultation and education.

**Public administration track**

Students who elect to pursue courses in the public administration track, developed jointly with the Department of Political Science and Public Administration, will, after completion of course work, be able to plan, organize, report, control and budget for public programs in aging. Grant writing and program evaluation skills will be developed as well. Students choosing the public administration track may wish to complete the Certificate in Public Management program (CPM).
This track concentrates on developing specialized knowledge and skills in the provision of services to the elderly, basic understanding and skills in at least one method of social work practice, commitment and ability to participate in the development of strategies and policies relevant to amelioration of social problems of the elderly, and the ability to integrate and use in practice knowledge of individual behavior and social structure with particular reference to the needs of the elderly.

**Research track**

This track is designed for students who would ultimately like to pursue a Doctor of Philosophy in the social or behavioral sciences or a Doctor of Philosophy in Health Related Sciences (School of Allied Health Professions). (All students who elect the research track must complete a thesis.) Students will obtain a strong background in experimental psychology research design and methodology and a broad background in life-span developmental theory.

The 42-hour degree program includes 24 hours of courses in gerontology, 12 hours in the chosen concentration area and six credits for thesis (or a thesis option).

**Admission policy**

The program is open to qualified students who have earned a baccalaureate degree from an accredited college or university or the equivalent, maintained a minimum GPA of 3.0 and have satisfactory scores on the GRE or MAT. A successful work experience may strengthen the admission credentials of applicants with marginal records.

Because of the diversity of undergraduate majors, candidates for the gerontology program must present evidence of successful completion of undergraduate courses in the following areas:

- biological science – minimum of six semester hours.
- psychology – minimum of three semester hours.
- sociology, anthropology or social work – minimum of three semester hours.
- statistics, research methods or equivalent – minimum of three semester hours. (Topics covered in this undergraduate course should be equivalent to those outlined for STAT 214 in the Undergraduate Bulletin.)

Candidates for admission who do not meet these requirements will be expected to complete the required undergraduate course work or to pass challenge examinations by the end of the first year. See Graduate Studies at VCU in this bulletin for admission requirements and procedures.

**Transfer and waiver of course credits**

Students who have completed graduate work in other graduate departments, whether at VCU or another university, may transfer no more than 12 credit hours of work at “B” level if such work is considered relevant by the departmental admissions committee. Also, a maximum of six hours of graduate credits accrued at a “B” level as a “special student” at VCU may be applied to the Master of Science degree or three hours to the certificate program, with approval of the
departmental Admissions Committee.

Transfer credits for graduate work at other institutions will be evaluated at the time of full admission to the program. To have credits transferred, students are required to prepare a synopsis of each graduate course that is to be transferred for review by the faculty. Each synopsis will include the name of texts used in the course and a specific listing of topics and material covered. Students may also apply for waivers of specific requirements in a similar manner.

**Master’s thesis**

- The master’s thesis is an option for students entering with a bachelor’s degree. Students may elect either a six-credit thesis or six hours of graduate course work to meet the 42-hour requirement.

- Each student shall arrange for a member of the gerontology program to serve as the chair of the thesis committee. With the chair’s approval, at least two additional committee members will be selected. At least two of the members must be from the Department of Gerontology.

The thesis chair will monitor and advise during thesis development. The student will take the major role in actual data collection. The thesis should be a publishable piece of research that makes some contribution to the field of gerontology.

**Written comprehensive examination**

A written comprehensive examination is required after completion of all required course work and before the student begins a practicum (field experience).

The comprehensive examination will be scheduled three times a year (early in the fall and spring semesters and once in the summer).

**Practicum**

Field experiences, with the supervision arranged by the director and program faculty, constitute an additional requirement. These experiences are intended to develop practical understanding, skills, attitudes and values essential for working with the aged in a variety of settings.

The practicum will involve a 600-hour placement (one semester full time or two semesters half time). Each student must submit a practicum proposal (prepared with the assistance of the adviser) that must be approved prior to beginning the practicum.

For those already employed in the field of gerontology, an approved special project may be substituted for the field experience placement. Those students who are working full time in a job outside the field of aging also may submit a proposal for review that may allow for their continued employment, while fulfilling this important requirement. All students must register for GRTY 607 Field Study in Gerontology.
Certificate in Aging Studies

The Certificate in Aging Studies program is designed to meet the needs of those individuals who want graduate training in gerontology but who do not want to complete the full master’s program. This program is complementary to the Master of Science program. Certificate students who wish to enter the Master of Science program must make formal application and abide by the admission requirements outlined in this bulletin.

There are post-baccalaureate and post-master’s certificate programs, as well as jointly presented specialty certificates: Aging Studies Program (emphasis in long-term care administration); M.S. in Occupational Therapy and Certificate in Aging Studies; M.S.W. and Certificate in Aging Studies; Certificate in Aging Studies with the Department of Rehabilitation Counseling; Certificate in Aging Studies with the School of Pharmacy. Courses for the certificate are also available in video format. Contact the Department of Gerontology directly for information on the telecourses at (804) 828-1565.

Admission Requirements

The Certificate in Aging Studies Program is open to qualified students who have earned a baccalaureate degree or a master’s or terminal degree from an accredited college or university or the equivalent.

Curriculum

General Certificate in Aging Studies Program

The certificate program of studies requires successful completion of 21 credit hours of work comprised of the following courses now offered in the gerontology graduate curriculum:

- The biology of aging, psychology of aging, social gerontology, and research methods form the basic core of the certificate program.

- Following the completion of these gerontology courses, students may choose two elective gerontology courses after consultation with their faculty advisers. Advisers counsel students as to the courses that would best suit their educational training needs. Students may choose from aging and human values; topical seminar; independent studies, problems, issues and trends in gerontology; recreation, leisure and aging; and other elective courses.

- In addition to the completion of these prescribed courses, each candidate for a Certificate of Aging Studies would be required to satisfactorily complete a project in gerontology on a subject approved by the faculty. This project may be a comprehensive literature review, a research project, or a training or demonstration project. Students would register for a three-credit course in independent studies (GRTY 692).

- For students who already have an M.S. or Ph.D., two three-credit independent study
courses are required (GRTY 792).

Certificate in Aging Studies program *(emphasis in long-term care administration)*

Students wishing to pursue the Certificate in Aging Studies program *(emphasis in long-term care administration)* must complete a total of 22 credit hours. In addition to the three basic core courses of the certificate program *(nine credits)*, students complete a three-credit field study and 10 credits of health administration courses, which focus on long-term care administration, hospital and medical law, and financial management in health organizations.

**Awarding of the certificate**

Upon successful completion of the total program described here, as well as maintaining a 3.0 GPA, students are awarded a Certificate in Aging Studies.
The departments of Occupational Therapy and Gerontology have developed a specialized version of the Certificate in Aging Studies program for students completing the post-professional Master of Science in Occupational Therapy. Students must meet admission requirements for the occupational therapy degree and the gerontology certificate program. The student is required to complete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRTY 601 Biological and Physiological Aging</td>
<td>3</td>
</tr>
<tr>
<td>GRTY 602 Psychology of Aging</td>
<td>3</td>
</tr>
<tr>
<td>GRTY 605 Social Gerontology</td>
<td>3</td>
</tr>
<tr>
<td>GRTY 792 Independent Study Project in Gerontology</td>
<td>3</td>
</tr>
<tr>
<td>GRTY elective – Any additional elective course in gerontology with approval of both the occupational therapy adviser and the gerontology department’s adviser.</td>
<td>3</td>
</tr>
<tr>
<td>OCCT 655 Older Adult Advanced Assistive Technology Application in Occupational Therapy</td>
<td>3</td>
</tr>
</tbody>
</table>

Contact the respective departments for additional curriculum information.
The School of Social Work in cooperation with the Department of Gerontology of the School of Allied Health Professions at VCU provides students with a unique educational opportunity in social work and gerontology. Master of Social Work students interested in work with the elderly or in gerontological programs may earn a Certificate in Aging Studies while completing the master's degree requirements.

Students must meet the admission requirements of the Master of Social Work program of the School of Social Work and of the Certificate in Aging Studies program in the Department of Gerontology, School of Allied Health Professions. Admission into one program does not guarantee admission into the other. In order to meet the requirements of the M.S.W. degree and the Certificate in Aging Studies, students complete a total of 65 graduate credits. Students complete all foundation and concentration courses of the M.S.W. program, and core courses (nine credits) of the Certificate in Aging Studies. Other requirements are met by (1) completion of M.S.W. research courses with students undertaking a research project focused on aging, (2) completion of concentration field instruction practicum requirements (six credits) in a social work setting related to aging and (3) completion of an independent study course in gerontology that integrates research and practicum courses.

Additional information may be obtained from either of the following offices:

**Department of Gerontology**

**School of Allied Health Professions**

Virginia Commonwealth University

P.O. Box 980228

Richmond, VA 23298-0228

Attention: M.S.W.-Gerontology Certificate Adviser

**School of Social Work**

Virginia Commonwealth University

1001 W. Franklin St.

Richmond, VA 23284-2027

Attention: M.S.W.-Gerontology Certificate Adviser
Master of Science in Rehabilitation Counseling and Certificate in Aging Studies

The Department of Rehabilitation Counseling, in cooperation with the Department of Gerontology, provides its degree-seeking students with the opportunity to earn the Certificate in Aging Studies while concurrently completing the requirements for the Master of Science in Rehabilitation Counseling. Students must meet admission requirements for both the rehabilitation degree and the gerontology certificate program, and admission into one is independent of the other. A total of 50 carefully prescribed graduate credits are necessary to complete requirements for both credentials. Most important, RHAB 696 Supervised Clinical Practice must be completed in a rehabilitation setting related to aging. Additional information, including the specific program of study for the counseling program, may be obtained in the Department of Rehabilitation Counseling. Information on the curriculum presented by the Department of Gerontology can be obtained by contacting the chair of the Department of Gerontology.

Admission deadlines and requirements

Both full- and part-time students are valued and are welcome to apply. Applications are reviewed on an ongoing basis. To be considered, all pertinent materials must be received in the department by Aug. 1 (for fall), Dec. 1 (for spring) or May 1 (for summer). Admission requirements include:

- an undergraduate GPA of 2.7 on a 4.0 scale; or 2.7 in the last 60 semester hour credits (Based upon transcripts provided to the Graduate School),
- three positive letters of reference from professors or employers (on reference forms provided by the Graduate School),
- satisfactory performance on either the GRE (804) 828-6916 or the MAT (804) 828-1193,
- a relevant and clear statement of goals for graduate study and career,
- statement of previous work or volunteer experience, and
- a personal interview with a faculty member may be required.

A complete set of application materials is available from the department office at (804) 828-1132.

Transfer credit

A maximum of 13 hours of graduate credit may be transferred from another VCU graduate program or outside institution if not applied previously to another degree. Transfer credits must carry a grade of “B” or higher from an accredited institution. Acceptance of transfer credit is
made at the level of the department chair and dean of the School of Allied Health Professions. Transfer credits earned as a nondegree-seeking graduate student are limited to six semester hours of credit. Credits earned as deficiency hours or to demonstrate the ability to compete at the graduate level, though transferable, may not be applied to the 48-credit program of study.
Certificate in Aging Studies
with the School of Pharmacy

The Department of Gerontology in cooperation with the School of Pharmacy provides an opportunity for students in the Doctor of Pharmacy program to complete the certificate. This 17-credit program is designed to integrate the required independent study project in gerontology into the Pharm.D. curriculum’s clerkship assignment.
Department of Health Administration

Education in health administration at the university began in 1949 with the establishment of a graduate curriculum in hospital administration. Early graduates received a certificate; the master’s degree was awarded beginning in 1955.

These early efforts grew and developed into the Department of Health Administration, which was established in 1972. The department now includes three major programs: (1) Master of Health Administration, (2) Doctor of Philosophy in Health Services Organization and Research, and (3) Professional Master of Science in Health Administration – Online. The department also cooperates with the T. C. Williams School of Law of the University of Richmond in offering a dual degree program in health administration and law. In 2001, the dual degree M.D./M.H.A. program was established with the VCU School of Medicine. Both master’s programs are fully accredited by the Accrediting Commission for Education in Health Services Administration (ACEHSA). In addition to these educational programs, the Department of Health Administration has a major research program and is involved in a wide range of public service activities, including continuing studies for health services administrators and other health professionals.

**Departmental purpose and functions**

The overall purpose of the Department of Health Administration is to provide educational programs and services related to the organization and administration of health services. In achieving that purpose, the department’s principal functions are to provide high-quality education leading to careers in the administration of health care institutions, agencies and systems and to provide advanced training and education for persons who will teach, plan, evaluate and investigate health care policies and medical care systems. Corollary functions are to provide assistance and other services for community organizations and to conduct health services and health policy research.

**Facilities**

The department is located in the William Grant House, formerly the Sheltering Arms Hospital, at 1008 E. Clay St., Richmond, Va. The chair’s office and the professional graduate programs offices are located on the second floor. The doctor of philosophy program office and the Williamson Institute are located on the third floor of the building.
The Medical College of Virginia Hospitals, one of the largest teaching hospitals in the nation, and other clinical facilities of the MCV Campus are readily accessible to the department’s students and faculty. In addition, the department has clinical affiliations and close working relationships with a large number of health care organizations and agencies in Virginia and throughout the United States. The organizations and agencies are used extensively as clinical facilities in the department’s educational programs.

**Endowed awards, lectureships and professorships**

**Earl Bullard Scholarship Fund**

The Bullard Scholarship Fund was established through the generosity of Charles H. Keaton and many other graduates of the M.S.H.A. Program. Scholarships generated by this fund are used to support students in the M.S.H.A. Program.

**Robert Hudgens Memorial Award**

The Robert Hudgens Memorial Award was established and endowed by the department’s alumni association in cooperation with the American College of Healthcare Executives (ACHE). The Hudgens Award is presented annually to the person selected by a special ACHE committee as the most outstanding young health care executive in the United States. It is a major, nationally recognized award presented at the annual ACHE Congress on Administration.

**Arthur Graham Glasgow Professorship of Hospital Administration**

The endowed Arthur Graham Glasgow Professorship of Hospital Administration was established in 1957 in honor of Glasgow, who had demonstrated a vital interest in hospitals and hospital administration.

**Herman L. Mullins Award**

The Herman L. Mullins Award is presented annually for the most outstanding management study completed by a graduate student in health services administration. This award was established by the Master of Health Administration Class of 1976 through the Health Administration Alumni Association as a lasting recognition for the contributions of Herman L. “Moon” Mullins as a teacher, adviser and friend of the student.

**Thomas C. Barker Preceptor Award**

The Thomas C. Barker Preceptor Award was established by the Master of Health Administration Class of 1996 in honor of the first dean of the School of Allied Health Professions, who was affiliated with the Department of Health Administration. Barker had served as chair of the Department of Health Administration and Master of Health Administration program director prior to becoming dean. The graduating class nominates and elects the preceptor who has demonstrated outstanding mentorship during the year of residency. Dedication to the Master of Health Administration program should be a consideration in the nomination.

**Stuart D. Ogren Scholarship Fund**
The Stuart D. Ogren Scholarship Fund was established by institutional members of the Virginia Hospital and Health Care Association, and Ogren’s friends and colleagues in 1990. The fund honors Ogren, a former president of the Virginia Hospital Association. During his distinguished career, Ogren made significant contributions to the effective provision of medical care services in the commonwealth and the formulation of health care policy in the commonwealth and the nation. These scholarships, supported through an endowment, are available to students who have been admitted to the department’s graduate program in health services administration (M.H.A. degree). Funds are employed to attract exceptionally well-qualified students (as defined by previous academic performance and work experience). The awardees are recognized each year at the Virginia Hospital and Health Care Association’s annual meeting.

**HCA Scholarship for Emerging Healthcare Leaders**

HCA Healthcare established the HCA Scholarship for Emerging Healthcare Leaders in order to formalize a partnership with the Department of Health Administration in recruiting the most qualified students. These scholarships, supported through an endowment, are available to students who have been admitted to the M.H.A. program. Funds are employed to attract exceptionally well-qualified students (as defined by previous academic performance, work experience and leadership roles).

**Jerry L. Norville Award**

The Jerry L. Norville Award is presented annually to the faculty member who, through example, demonstrates exceptional dedication and genuine concern for the welfare of students in the Master of Health Administration program. This award was established by the Master of Health Administration Class of 1989 in honor of Professor Jerry L. Norville who served on the faculty for 20 years and, during that time, served as director of the Master of Health Administration program and as department chair.

**David G. Williamson Jr. Institute for Health Studies**

Officially initiated in 1987, the David G. Williamson Jr. Institute for Health Studies was named in memory of Mr. David G. Williamson Jr., formerly the vice chair of the Hospital Corporation of America and one of the department’s leading alumni. Williamson played a major role in making it possible for the institute to be established. The institute serves as a bridge between the department and administrative and clinical leaders in health care by sponsoring instructional, research, and outreach programs focused on the organization and financing of health services. Such programs are designed to help resolve the often conflicting requirement that health care organizations be simultaneously cost effective, innovative and responsible for serving society’s needs.

**Dolores G. Clement Award for Outstanding Advising**

Dolores G. Clement Award for Outstanding Advising was established by the Master of Health Administration Class of 1998 in honor of Dolores G. Clement, Dr.P.H. The award recognizes a faculty member for counsel and support outside of the classroom. More specifically, the award is
in recognition of faculty who have demonstrated extraordinary dedication to the academic, professional and personal growth of students. This award has been established to honor Clement for her years of devotion to the Department of Health Administration.

Paul A. Gross Distinguished Leadership Speaker Series

The Paul A. Gross Distinguished Leadership Speaker Series is a program to bring to Virginia Commonwealth University the nation's leading scholars and health care executives to discuss topics on the cutting edge of research, scholarship and management expertise in the U.S. health care system. Its overarching goal is to increase the awareness of VCU students, faculty and alumni about current issues in the administrative world of the health care system.

Carl Fischer Fund

The friends and associates of Carl Fischer, former chief executive officer of the Medical College of Virginia Hospitals, established this endowment to honor the excellent leadership Fischer provided to the hospital. This fund will support students with an interest in health care administration.

Department of Health Administration Award in Managerial Ethics

Established through a gift from anonymous donors, this award is conferred annually to a professional student in the Department of Health Administration to recognize his or her inquiry into the ethical challenges facing those who manage health care organizations. The intent of this award is to foster the development of a sense of duty to humanity in health care managers, as exhibited by the morality needed in the administration of the health care enterprise in working with and for people.

Department of Health Administration Alumni/ae Scholarship Fund

Through the generous donations of departmental alumni and alumnae, this fund is available for scholarship support to attract and maintain professional students who exemplify the highest standards of academic performance and leadership capability.

Ham Flannagan Scholarship Fund

This fund was founded through the generosity of the friends of Paul F. “Ham” Flannagan, M.H.A. 1954, a long-time supporter of the Department of Health Administration and mentor to literally dozens of departmental graduates. The fund’s objective is to support students making a firm commitment to excellence in health care administration.

Fleetwood Scholarship Fund

The Fleetwood Scholarship Fund is a memorial to James M. Fleetwood Jr., an honorary alumnus, preceptor and long-time friend of the Department of Health Administration. The fund’s purpose is to honor his memory with scholarships to support M.H.A. students needing financial aid in the department.

Hyneman-Mick Endowment Fund
This endowment was established to promote excellence in scholarship by a doctoral student or students enrolled in the Ph.D. Program in Health Services Organization and Research in the Department of Health Administration. The goal is to create opportunities for doctoral students to advance their education and research capabilities.

**James W. Begun Award for Excellence in Doctoral Studies**

To commemorate the 50th anniversary of the founding of the Department of Health Administration in 1999, the doctoral alumni/ae established the James W. Begun Award for Excellence in Doctoral Studies. Once the final doctoral dissertation has been defended, faculty members may nominate doctoral students for this award. Selection criteria include: dissertation quality, advancement of organizational theory and health service research, and the applicability of the research findings.
Master of Health Administration

The graduate program in health services administration is designed to prepare persons for administrative roles ultimately leading to top-level executive positions in complex health services organizations. The curriculum emphasizes strategic and operational management, thus orienting students toward the broad spectrum of managerial problems and functions likely to be encountered by health services organizations.

The program’s educational objectives and content are based upon the premise that a large number of students who select this curriculum aspire to become senior executives of health care organizations at some point in their careers. A comprehensive listing of these goals is set forth in a separate document, “Educational Objectives of the Graduate Program in Health Services Administration.”

The graduate program in health services administration is designed primarily for full-time students. A limited number of part-time students may be accepted into the program. The admissions standards and degree requirements for part-time degree candidates are the same as those for full-time degree candidates.

The graduate program was accredited initially in 1968, one of the first programs in the United States to achieve that status. It has continuously maintained its national accreditation status, and in 2002 the program was awarded a seven-year accreditation.

Dual degree program in medicine and health administration

Advanced study in health administration and medicine is available through a dual degree program co-sponsored by the department and the VCU School of Medicine. The program leads to the awarding of the Doctor of Medicine and Master of Health Administration degrees. The objective of the M.D./M.H.A. program is to provide highly motivated medical students the expertise for management and leadership competency in complex health care organizations. The program may be completed in five years. Applicants for this program are required to meet the admission requirements of each program. For information regarding the dual degree program, contact the director of the program.

Dual degree program in health administration and law

Advanced study in health administration and law is available through a dual degree program co-sponsored by the department and the T. C. Williams School of Law at the University of Richmond. The program leads to the awarding of the Master of Health Administration and Juris Doctor degrees. Participants are provided the necessary expertise either to represent clients
within the health care industry or to function as legal policy-makers or administrators who fully appreciate the legal environment of the health care field. Applicants for this program are required to meet the admission requirements of each program. For information regarding the dual degree program, contact the director of the program.

Admission requirements – M.H.A. and dual degree programs

Applications are encouraged from persons who have earned undergraduate or graduate degrees in any discipline or field of study. However, to be eligible for admission to the graduate program, completed course work must include basic preparation in economics, financial accounting and business statistics. In addition, a working knowledge of college-level algebra is necessary preparation for the graduate program’s courses.

The foundation requirements may be met by the following specifications:

- completing specified prerequisite courses with a grade of “C” or better within the past five years at any accredited college or university,
- completing specified foundation courses within the School of Business at VCU or
- providing other evidence of competency acceptable to the admissions committee.

Any or all of these three foundation courses may be taken in VCU's School of Business during the summer session immediately before the fall semester when the student enrolls in the graduate program in health administration. The foundation courses provide an excellent opportunity for students without a strong background in business to fulfill the course work requirements for entrance into the graduate program. In addition, students who have met all or some of the prerequisite requirements may strengthen their preparation for the graduate program by taking other foundation courses in the business school’s summer session. These include courses in marketing, business law, finance and other areas. The foundation courses cannot be applied toward the 60 semester hours required for the Master of Health Administration degree.

Foundation courses at the graduate level are available only to those who already have been admitted to a graduate program offered by the department.

To be considered for admission into the graduate program in full status, the applicant must meet the following minimum qualifications: (1) present evidence of personal achievement, scholarship, intellectual ability and professional promise, (2) hold a baccalaureate or graduate degree from a college or university that is fully accredited by the Association of American Universities or by a regional accrediting agency, (3) have an overall GPA of 3.0 or higher on a 4.0 scale in undergraduate work or provide evidence of high achievement in a substantial amount of graduate-level course work, (4) attain a satisfactory score (at least 50th percentile in each category) on the Graduate Record Examination or the Graduate Management Aptitude Test, and (5) other factors such as personal interview and prior work experience. Enrollment in the program is limited and competition is strong. Meeting the minimum qualification above is not generally sufficient for admission.

Applicants who have completed the prerequisite course work and meet the other requirements may be admitted into the graduate program in full status. Students in full status are candidates for the Master of Health Administration degree. Full status is maintained as long as the student
achieves a GPA of 3.0 in all course work each semester.

If an applicant presents qualifications that approximate the admissions requirements and standards, that applicant may (at the discretion of the Admissions Committee) be admitted into the graduate program on provisional status. Advancement to full status may be approved by the faculty when the student has satisfactorily completed one or more semesters of graduate studies. Students admitted on provisional status who do not meet GRE/GPA standards will be reviewed by the faculty for dismissal from the program or continuation on probationary status at the end of their first semester of graduate studies if they have not earned at least a 3.0 GPA for all courses attempted or if they have earned a grade of less than "C" in any course. Complete information regarding academic requirements and standards is set forth in Academic Policies and Regulations for the Graduate Programs in Health Administration (M.H.A. and M.S.H.A.).

VCU is a state-aided institution, and preference is given to applicants with equal qualifications who are Virginia residents. Persons from countries other than the United States may apply for admission to the department's graduate program. Foreign applicants must meet all the regular admission requirements, score a minimum of 600 on the Test of English as a Foreign Language, submit evidence of a preapproved residency site in the home country and submit evidence of financial responsibility as stated in the Graduate Studies at VCU section of this bulletin.

Application forms and instructions for applying to all graduate programs are available on the Graduate School Web site.

Requests for further information regarding admission requirements, standards and procedures may be directed to the Department of Health Administration, School of Allied Health Professions, Virginia Commonwealth University, P.O. Box 980203, Richmond, VA 23298-0203.

**Transfer credit**

Applicants who have earned graduate credit elsewhere or at VCU that has not been previously applied to another earned degree may, at the discretion of the faculty, be permitted to transfer a maximum of one third the didactic semester hours to apply toward the degree credit requirements. Transfer credit may be allowed when, in the judgment of the faculty, the applicant has satisfactorily completed graduate course work elsewhere that is equivalent to courses in the graduate curriculum.

Petitions to transfer credit are to be prepared by the applicant and submitted to the program director prior to entering the program. It is the applicant’s responsibility to establish: (1) that the institution has at least regional accreditation, (2) that the course was completed with a grade of "B" or better within the last five years and was not previously applied to an earned degree, and (3) that the course is equivalent to a required or elective course appropriate to the M.H.A. curriculum. (A course syllabus or detailed letter from the instructor, which describes the purpose, objectives, content and course readings will ordinarily be required.) The program director ensures that the petition is sufficiently documented and refers it to the primary instructor of the related course or courses. The primary course instructor reviews and notes a recommendation on the petition and forwards it to the program director for final approval and communication to the Graduate School.
Admission for VCU Honors students

VCU Honors Students are eligible to apply for admission to the M.H.A. Program during their junior or senior years of undergraduate study. The application process is the same as for other applicants with the following exceptions: (1) requirements for the GRE or GMAT are waived; (2) application fee is waived; and (3) official transcript is not needed (as grades can be accessed in the VCU system). The admission decision will be made by the M.H.A. Admissions Committee, at which time a place will be reserved for the student, provided the student graduates with honors and completes the prerequisite course work.

Curriculum

Students are required to complete a total of 60 semester hours (including transfer credit, if any) to qualify for the Master of Health Administration degree. This requirement includes 46 hours of core course work plus at least six semester hours of elective studies in health administration and related disciplines, such as business administration, public administration, urban and regional planning, and gerontology. In addition, eight semester hours of practicum course work are required as a part of the administrative residency. The graduate program is designed to provide a balanced combination of academic studies and field experience to enable students to achieve the program’s educational goals and become well-prepared to enter the field of health administration.

The core curriculum of the graduate program in health administration consists of 16 courses totaling 46 semester hours that must be completed by all degree candidates. These courses represent an integrated series of learning experiences designed to provide students with a common body of knowledge and skills which are considered to be essential.

Core courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HADM 602</td>
<td>Health System Organization, Financing and Performance</td>
<td>3</td>
</tr>
<tr>
<td>HADM 606</td>
<td>Health Care Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>HADM 607</td>
<td>Financial Management in Health Organizations</td>
<td>3</td>
</tr>
<tr>
<td>HADM 608</td>
<td>Seminar in Health Care Finance</td>
<td>3</td>
</tr>
<tr>
<td>HADM 609</td>
<td>Health Systems and Epidemiology Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>HADM 610</td>
<td>Health Care Management Decision Support Systems</td>
<td>3</td>
</tr>
<tr>
<td>HADM 611</td>
<td>Hospital and Medical Law</td>
<td>4</td>
</tr>
<tr>
<td>HADM 612</td>
<td>Health Information Systems and Performance</td>
<td>3</td>
</tr>
<tr>
<td>HADM 614</td>
<td>Health Care Marketing</td>
<td>3</td>
</tr>
<tr>
<td>HADM 624</td>
<td>Health Economics</td>
<td>3</td>
</tr>
<tr>
<td>HADM 631</td>
<td>Managed Care</td>
<td>3</td>
</tr>
<tr>
<td>HADM 646</td>
<td>Organization Behavior and Design in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HADM 647</td>
<td>Operations Management in Health Care Organizations</td>
<td>3</td>
</tr>
<tr>
<td>HADM 648</td>
<td>Strategic Management in Health Care Organizations</td>
<td>3</td>
</tr>
<tr>
<td>HADM 682</td>
<td>Executive Skills I</td>
<td>1</td>
</tr>
<tr>
<td>HADM 683</td>
<td>Executive Skills II</td>
<td>1</td>
</tr>
<tr>
<td>HADM 691</td>
<td>Special Topics</td>
<td>1</td>
</tr>
</tbody>
</table>


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As part of the core curriculum and elective courses, students in the Master of Health Administration program complete a one-year series of executive skills seminars. These seminars are designed to focus on individual development of personal skills essential to success in health administration.

Students in the M.H.A./J.D. program are required to complete 44 semester hours while in the graduate program in health administration. Students take all the Master of Health Administration curriculum core courses except HADM 611 Hospital and Medical Law and the eight-credit Administrative Residency. M.H.A./J.D. students are waived from HADM 611. It is not necessary to replace this course with another elective course in the M.H.A. program.

Students in the M.D./M.H.A. program are required to complete 47 semester hours while in the graduate program portion. Students take the M.H.A. core courses except HADM 608, 682 and 683. A course in physician practice management is required.

Students in the M.H.A./J.D. and M.H.A./M.D. programs must take one administrative internship of at least three credit hours. This may be completed between the first and second years in the M.H.A. program. Satisfactory completion of the oral comprehensive seminar is required during the semester preceding graduation.

**Administrative residency**

**Purpose of the residency**

The administrative residency is an integral part of VCU’s graduate program in health services administration. The basic purpose of the residency is to provide students opportunities to apply and further develop their administrative knowledge and skills through a period of applied experience in an operational setting. The administrative residency is supervised directly by experienced executives who serve as the students’ preceptors.

Through a carefully selected and organized residency experience, students strengthen the foundation of general knowledge and skills gained through the core curriculum and develop further insight and expertise in their selected concentrations. Students serve their residency in the type of health care organization in which they wish to gain specialized knowledge, skills and experience. Overall policies and guidance for the administrative residency are established by the Department of Health Administration and are included in Handbook for the Administrative Residency of the Graduate Program in Health Administration.

**Appointment to the residency**

Students become eligible for entrance into the administrative residency after completing 52 semester hours of specified course work and achieving an overall GPA of 3.0. Students on academic probation or with any incomplete grades during their final on-campus semester prior to their residency may, at the discretion of the faculty, be prevented from entering their residency although their overall GPA is 3.0 or higher.

In addition to meeting the above academic requirements, the student must, in the judgment of
the faculty, present evidence of readiness for a clinical experience by demonstrating sufficient academic proficiency in the core areas of the curriculum and by demonstrating professional maturity.

The director of the M.H.A. program or his/her designee has the responsibility to coordinate residency placements. In making these assignments, the director will consider the preferences of the students, the preferences of the preceptors and the recommendations of faculty advisers. Students’ preferences may not always be met. Administrative residents are paid a salary by the organization in which they are being sponsored.

On-campus commitments during the residency

During the residency phase of the graduate program, students must attend scheduled on-campus seminars and must participate in a series of electronic seminars on topics related to the residency experience. During the on-campus seminar, students will participate actively in other educational activities associated with course work HADM 693, 694 and 695 taken during the residency year.

Equipment requirements

All associates admitted to the program must have access to a multimedia personal computer. Specific hardware and software requirements are available from the department. In addition, associates must be able to access the Internet from their personal computer. Access is usually obtained through a local Internet service provider by purchasing an Internet subscription.

Although associates can use a personal computer at the office, we strongly recommend that they have one at home.

Residency policies and procedures

A complete statement of academic policies and procedures relating to the administrative residency phase of the graduate program is set forth in Administrative Residency Policies and Procedures, in the Handbook for the Administrative Residency of the Graduate Program in Health Administration.

Length of the program

Students ordinarily will begin their studies during the fall semester and complete their course work requirements within 21 months. For most students, this portion of the graduate program will be followed by an administrative residency of 12 months.

Requirements for graduation

To qualify for the Master of Health Administration degree, students must meet the following requirements: (1) achieve an overall GPA of 3.0 on a 4.0 scale for all graduate curriculum course work, (2) satisfactorily complete all requirements of the administrative residency including required course work taken during the period, (3) present a comprehensive seminar administered near the end of the graduate program and, (4) in the judgment of the faculty,
demonstrate sufficient maturity, development and abilities in health services administration to constitute readiness to enter the profession of health administration.

Degrees are conferred at commencement exercises of the university in December and May.

**Academic policies and regulations**

Academic policies and regulations for the graduate program in health services administration are set forth in separate documents published by the Department of Health Administration. These departmental documents, as well as publications that state university-wide policies and regulations, may be obtained by applicants at the time of their interviews.
Professional Master of Science in Health Administration – Online

The professional program is a 22-month full-time and 31-month part-time distance-learning course of study leading to the award of a Master of Science in Health Administration. It can be completed while working full time, because time away from work and home is minimized. The program is designed specifically for self-motivated, mature and experienced professionals who are seeking advanced preparation in management. Part-time options also are available.

The program is designed to meet the distinctive professional development needs of:

- clinicians,
- physicians,
- mid-level managers,
- executive-level managers and
- functional specialists.

Curriculum

Each semester is composed both of on-campus and off-campus sessions. During the six one-week on-campus sessions, students attend professional program classes on the MCV Campus. During the off-campus session of each semester, students continue studies at their home or work site, employing a carefully planned array of distance-learning technologies.

A new class begins each July/August. The schedule of courses is as follows:

<table>
<thead>
<tr>
<th>First semester (Fall)</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HADE 602 Health Systems Organization, Financing and Performance</td>
<td>3</td>
</tr>
<tr>
<td>HADE 624 Health Economics</td>
<td>3</td>
</tr>
<tr>
<td>HADE 690 Leadership and Health Care Organizations</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Second semester (Spring) – Part I</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HADE 606 Health Care Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>HADE 610 Health Care Management Decision Support Systems</td>
<td>3</td>
</tr>
<tr>
<td>HADE 646 Organizational Behavior and Design in Health Care Management</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second semester (Spring) – Part II</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HADE 631 Managed Care</td>
<td>3</td>
</tr>
<tr>
<td>HADE 613 Employment and Labor Law for Health Care Organizations</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third semester (Fall)</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HADE 607 Financial Management in Health Organizations</td>
<td>3</td>
</tr>
</tbody>
</table>
Hade 611 Health Care Law and Bioethics 3  
Hade 612 Health Information Systems and Performance 3  
Hade 615 Managerial Epidemiology 2  

**Fourth semester (Spring)**  
Hade 614 Health Care Marketing 3  
Hade 648 Strategic Management in Health Care Organizations 3  
Hade 681 Special Topics: Advanced Medical Informatics (Elective) 3  
Hade 681 Special Topics: Human Resource and Career Planning in Health Care Organizations 1  

The program’s courses are designed to meet the distinctive needs of the experienced health care professional. Courses develop business skills for the unique health care environment so that students are prepared to meet the challenges of the health care marketplace. Classes draw upon the knowledge of the faculty and the diverse group of experienced professionals enrolled.

**On-campus study**

During the 22-month curriculum, associates spend six one-week sessions on the MCV Campus. On-campus sessions are held during July and August, December and May.

During on-campus sessions, students attend lectures, participate in seminars, and use the department’s computer facilities and the VCU library. Ample opportunity is provided to interact with other associates, faculty and visiting scholars and practitioners. Courses meet during the day. Evenings are reserved for study, group project work, informal interaction with fellow associates, relaxation and planned social events.

All courses are designed carefully to facilitate effective and efficient learning. Associates are provided with detailed outlines of lectures, a complete handout set and comprehensive learning/study guides for the material covered.

While in residence at the university, students stay in conveniently located hotels. Meals can be obtained for reasonable prices in the hotel or at a wide variety of restaurants in the immediate area. Students are encouraged to take advantage of the university’s recreational facilities and the cultural and entertainment opportunities of Richmond and the surrounding area.

**Off-campus study**

During the off-campus session, students continue course work at their places of residence and/or employment. Full-time students are expected to devote 15 to 20 hours per week to study during the off-campus period of each semester. They employ the following distance learning technologies in their studies.

**Internet-based courses**

The Department of Health Administration was a leader in developing the course software which now is used all over the world. Each course has its own electronic classroom. Faculty members distribute announcements and assignments, and conduct seminars and forums. Students can
chat online, take practice quizzes and listen to recorded messages from faculty. The Web site and the Web-based technology are designed with the computer novice in mind. Students are trained to use the software and can receive support from our computer instructor as well as faculty.

**Computer-assisted Instruction (CAI)**

CAI makes it possible to offer individual lessons on a disk or CD. By using a personal computer, students are guided through a series of instruction modules and problem sets. They proceed at their own pace and receive constant feedback regarding their level of knowledge and skill acquisition. No previous computer experience is required to use CAI packages.

**Equipment requirements**

All associates admitted to the M.S.H.A. program must have access to a multimedia personal computer. Specific hardware and software requirements are available from the department. In addition, associates must be able to access the Internet from their personal computer. Access is usually obtained through a local Internet service provider by purchasing an Internet subscription.

Although associates can use a personal computer at the office, we strongly recommend that they have one at home.

**Admission requirements**

Application procedures and admission requirements for the M.S.H.A. program are different than other courses of study offered by the university, so interested individuals should contact the department. The material can be obtained by writing Professional M.S.H.A. Program – Online, Virginia Commonwealth University, P.O. Box 980203, Richmond, VA 23298-0203, by calling (804) 828-7799 or from the department Web site. Applications are accepted beginning in September for admission to the program in July of the following year. The early application deadline is March 15 and the regular application deadline is April 1 of each year.

The professional program admits individuals with diverse educational, work and life experiences who have the demonstrated capacity to pursue a rigorous course of professional graduate study.

To be considered for admission to the professional program applicants must, at a minimum:

- possess a baccalaureate degree from an institution of higher learning recognized by VCU and have a 2.75 GPA for all undergraduate work completed,
- have five years of professional health care work experience,
- submit scores on a standardized aptitude test for graduate studies (GRE or GMAT),
- submit a resume and personal statement and
- forward all required application and supporting materials to the Graduate School.

**Previous educational experience**

Applicants with less than a 2.75 undergraduate GPA who have exceptional professional experience will be considered for admission on provisional status. Provisional status will be
removed after satisfactory completion of the first semester of the program. If an applicant has completed any graduate studies (whether or not a degree was awarded), performance in such course work will be considered in the admission decision.

**Work experience**

Applicants are expected to have at least five years of professional health care work experience as documented in a professional resume. The specific experience profile deemed appropriate for admission to the professional program depends upon one’s particular profession or occupation. The resume is a very important element of the application materials. Applicants are encouraged to prepare the resume in such a way that it accurately and completely describes their accomplishments.

**Graduate studies aptitude tests**

VCU requires that all applicants for graduate study submit standardized aptitude test scores. The professional program will accept scores on either the GMAT or the GRE. Applicants who have taken the GMAT or GRE in the last five years may submit previous scores. Those applicants holding certain graduate or professional doctoral degrees (for example, M.D., D.D.S., J.D., Pharm.D.) may have GMAT or GRE requirements waived upon petition to the graduate dean. Applicants should make arrangements to take the examination of their choice at the earliest possible date.

**Prerequisites**

No specific previous course work is required for application to the program. Upon formal acceptance, associates will be provided independent-study modules in three areas: microeconomics, accounting and statistics. These modules include books, articles, programmed instruction handbooks and computer-aided instructional material. Completing these independent-study modules precludes the need for taking prerequisite course work prior to instruction. Applicants having acceptable previous course work in accounting, microeconomics and/or statistics will not be required to complete these independent-study modules.

**Academic policies and regulations**

Academic policies and regulations are set forth in separate documents published by the Department of Health Administration. These documents, as well as the university-wide policies and regulations, are available from the department. They are reviewed during orientation sessions.

**Financial considerations**

Interested students should contact the department for current tuition and fee information. In addition to tuition and fees, students will need to budget for the following expenses:

- computer equipment
- text books and reading packets
● travel, meals, lodging and personal expenses associated with attending the on-campus sessions in Richmond

Applicants are encouraged to consult a tax adviser regarding the rules and procedures governing educational deductions for income taxes.

If accepted to the professional program, students will be required to forward a nonrefundable payment of $500 to hold a place in the class. This payment is applicable to first semester tuition and fees. Full payment for tuition and fees is due approximately 30 days prior to the beginning of each semester.
Ph.D. in Health Services Organization and Research

The Ph.D. in Health Services Organization and Research program is a challenging 57-credit program that prepares individuals for positions as faculty, researchers, policy analysts and top-level staff in complex health organizations. Students learn to apply research methods and scientific knowledge drawn from the behavioral and managerial sciences to the study of health organizations, services and systems. The program is designed to meet the distinctive professional development needs of (1) clinical professionals who want to prepare for positions as faculty and independent researchers, (2) administrative professionals who want to prepare for positions as faculty, researchers or consultants, and (3) researchers and policy analysts who want to create depth through specialization in health services organization and research.

Courses are distributed across four areas: foundations of health services organization and research (nine credit hours), health services organization theory (12 credit hours), health services research methods (18 credit hours), and an area of specialization (nine credit hours). Students take two written comprehensive examinations, covering health services organization theory and health services research methods. Areas of specialization are drawn from elective courses and from independent study with faculty members in their areas of expertise, such as long-term care, mental health services, managed care, quality management or international health. The course work is sequenced so that it can be completed in two years of full-time study or three years of part-time study (exclusive of dissertation credits). In addition, nine credit hours of dissertation credit are required. Students orally defend a written dissertation proposal before their dissertation committee. Subsequently they write and orally defend the completed dissertation.

Admission procedures and requirements

The program admits students with diverse educational, work and life experiences who have demonstrated a capacity to pursue a rigorous course of doctoral study. Admission is limited, competitive and open to students with clear career goals in health services administration and research.

Admission requirements include (1) a graduate degree in an academic or professional field with a GPA of “B” or higher, (2) working knowledge of college-level algebra, especially matrix algebra, (3) advanced courses in statistics and economics, (4) a minimum score of 550 on verbal and 600 on quantitative sections of the GRE, (5) for international students, scores from the Test of English as a Foreign Language, (6) transcripts and application forms, (7) three letters of recommendation, and (8) personal interviews with members of the Admissions Committee. The department recommends that candidates have at least one to two years experience in the health
care industry before beginning the program. The application deadline is April 15.

Financial aid

A selected number of graduate assistantships are available, covering tuition plus a stipend of about $8,900. Students with assistantships must pursue full-time study (12 credits each in fall and spring semesters; six credits in summer semester). Some research assistantships, paying a stipend, also are available in the department.

Information

Further information may be obtained by writing the Doctoral Program Director, Department of Health Administration, School of Allied Health Professions, Virginia Commonwealth University, P. O. Box 980203, Richmond, VA 23298-0203; by phoning (804) 828-5220 or visiting the Department of Health Administration Web.
The program was first organized in 1969 as the School of Nurse Anesthetists, thus becoming the first academic program to be implemented in the newly organized School of Allied Health Professions on the MCV Campus.

A letter of intent for a proposed Master of Science in Nurse Anesthesia program was submitted to the commonwealth's Council on Higher Education in 1977. When approved in May 1978, the graduate degree in nurse anesthesia became the first such offering within the profession of nurse anesthesia. While of major importance to the university, it marked a significant milestone for the profession of nurse anesthesia. The first class of graduate students was admitted in the fall of 1979 and graduated in the fall of 1981. A second hallmark was achieved in 1979 with the approval of the postgraduate curriculum for practicing certified registered nurse anesthetists (CRNA) offering a Master of Science in Nurse Anesthesia. The first students graduated in the summer of 1983.

**Philosophy**

The philosophy of the department reflects the beliefs of the faculty and provides the foundation for the curriculum in the program. The department’s philosophy is synergistic with the mission and goals of the School of Allied Health Professions and VCU.

The department is a social agency dedicated to the education and development of health care professionals in the field of nurse anesthesia. Consequently, the faculty recognizes and accepts the responsibility entrusted to it for the learning experiences of its students.

The philosophical orientation of the faculty subscribes to the belief that learning is a developmental process through which cognitive, affective and psychomotor behaviors are developed and/or modified. This process includes the acquisition of information, the transferal of knowledge, the evaluation of new skills and the development of a professional attitude and bearing.

The faculty subscribes to the belief that the learning experience is both positive and rewarding. It is a transactional experience between the student and teacher through formal and informal processes. The program’s objective is the production of knowledgeable and skillful CRNAs. Hence, learning is a lifelong process that results in a change in thinking, values and behavior. The teaching-learning process includes teacher-learner interaction in: setting goals, assessing and selecting learning experiences, determining instructional methods, and evaluating the
learner’s progress. Learning experiences are planned in manageable segments and provide for integration and continuity in the attainment of knowledge, skills and attitudes consistent with the educational objectives and the individual needs of students. Each student is a unique human being possessing dignity, worth and the right to equal educational opportunities. Faculty and students share the responsibility for creating an educational climate that reflects democratic values, fosters intellectual inquiry and creativity, and encourages the maximum development of each individual’s potential.

The American health care system is becoming progressively complex. Technological advances and changing economic patterns foster competition for scarce resources while the patient population is becoming quite diverse. As a result, the role of the CRNA is becoming increasingly collaborative and complementary with other health professionals. In this environment, CRNAs have more responsibility and authority for coordination, decision-making and leadership of the multidisciplinary team, as well as for research, planning and development of health resources.

Graduate education in nurse anesthesia at the master’s level builds upon baccalaureate education with a nursing focus. It is designed to allow graduates the opportunity to become leaders and make significant contributions with the intended outcome of improving health care and advancing nurse anesthesia theory and practice through research. Consequently, the program prepares CRNAs through a team concept of a joint practice of anesthesia care composed of both nursing and medical components to meet the current and emerging health needs of society.
School of Allied Health Professions

Master of Science in Nurse Anesthesia

The overall objective of the program is to prepare registered professional nurses for practice in the art and science of the specialty of nurse anesthesia. Given a patient or patient-care situation in the practice of nurse anesthesia, the graduate will:

- formulate and discuss a patient’s anesthesia care plan (ASA Classification I-V),
- implement and evaluate anesthesia management plans,
- perform and utilize appropriate procedures during the anesthetic management of a patient,
- evaluate the postoperative course of a patient,
- perform, within medically established guidelines, resuscitation of the newborn infant, child or adult,
- function, within medically established guidelines, as a team leader for cardiovascular and/or pulmonary emergencies,
- provide first echelon care and maintenance of all anesthesia equipment, and
- develop interpersonal behaviors consistent with that of a health care professional.

Accreditation

The nurse anesthesia program is fully accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs. Graduates are eligible to take the examination for certification conducted by the Council on Certification of Nurse Anesthetists.

Admission requirements

In addition to the general university requirements, the requirements for admission to the Master of Science in Nurse Anesthesia Program are:

- baccalaureate degree (nursing preferred),
- current licensure as a registered professional nurse in Virginia (by completion of the first semester),
- cumulative undergraduate GPA of 3.0 or higher on a 4.0 scale (preferred),
- upper-division undergraduate organic chemistry course, no lab required (suggested),
- completion of the GRE within five years of application,
- a minimum of one year’s experience in an area of acute/critical care nursing (recent),
- personal interview with members of the Admission Committee (by invitation), and
three professional references (one must be from an immediate supervisor with contact phone number attached).

Further inquiries should be made to the Graduate School, Virginia Commonwealth University, P. O. Box 843051, Richmond, VA 23284-3051, (804) 828-6916. See the Department of Nurse Anesthesia Web site for more information.

### Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
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<td>NRSA 601</td>
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<td>NRSZ 601L</td>
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<td>5</td>
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<td>MEDC 532</td>
<td>Medicinal Chemistry for Nurse Anesthetists</td>
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<td>NRSA 622</td>
<td>Clinical Practicum I</td>
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<td>NRSA 642</td>
<td>Professional Aspects of Anesthesia Practice I</td>
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<td>Summer session I</td>
<td>NRSA 633</td>
<td>Pathophysiology for Nurse Anesthesia</td>
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<td>NRSA 603</td>
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<td>NRSA 683</td>
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<td>NRSA 624</td>
<td>Clinical Practicum III</td>
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<td>NRSA 604</td>
<td>Principles and Practice of Nurse Anesthesia IV</td>
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<td>NRSA 625</td>
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<td>NRSA 605</td>
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<td>NRSA 606</td>
<td>Principles and Practice of Nurse Anesthesia Practice IV</td>
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Fall session III
ALHP 591 Special Topics in Nurse Anesthesia 2
NRSA 627 Clinical Practicum VI 6
NRSA 647 Professional Aspects of Anesthesia Practice III 1

9
Master of Science in Nurse Anesthesia – Post-certification CRNA Program

The Department of Nurse Anesthesia offers, based on advanced standing, a Master of Science in Nurse Anesthesia for the Certified Registered Nurse Anesthetist (CRNA).

Philosophy

The Master of Science degree is basic to entry-level specialization in nurse anesthesia. This practice of nursing is viewed as an expanded role in which the nurse anesthetist, as a clinical specialist, provides nursing and medically prescriptive services for the patient presenting for anesthesia. Anesthesia services can be provided best through a team concept composed of nursing and medical components.

The post-certification CRNA Master of Science in Nurse Anesthesia program curriculum is a single track design with a clinical or teaching option. This approach best reflects the achievement of the program’s stated objectives. The curriculum parallels the basic Master of Science in Nurse Anesthesia degree that ensures an expanded theoretical knowledge base and increased clinical competence. The similarities between the post-certification and generic CRNA programs provide uniform credibility in the degree awarded.

Admission requirements

Requirements for admission to the Master of Science in Nurse Anesthesia for those students who are already certified nurse anesthetists are:

- a baccalaureate degree (nursing preferred),
- graduation from a nationally accredited educational program in nurse anesthesia,
- certification by a national examination as a CRNA,
- current recertification as a CRNA by the Council on Recertification for Certified Registered Nurse Anesthetists,
- current licensure as a registered professional nurse in Virginia (by completion of the first semester),
- cumulative GPA of 3.0 or higher on a 4.0 scale (preferred),
- completion of the GRE within five years of application,
- upper-division undergraduate organic chemistry course, no lab required (recent),
- a minimum of one year’s experience as a CRNA,
- references from current supervising nurse anesthetist (CRNA), chair or chief...
anesthesiologist, and one professional colleague,

- personal interview with members of the Admissions Committee by invitation, and
- proficiency examination (advanced standing).

**Advanced standing**

Advanced standing is based on:

- graduation from a nationally accredited educational program in nurse anesthesia,
- certification by examination as a CRNA,
- current recertification as a CRNA by the Council on Recertification for Certified Registered Nurse Anesthetists, and
- proficiency examination. Part A – Written: 100 multiple choice objective questions; Part B – Oral: two anesthesiologists and two CRNA graduate faculty. Advanced standing of one-third of the generic Master of Science in Nurse Anesthesia degree curriculum will be awarded for the following courses (nontransferable to the VCU transcript).

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>NRSA 601 Principles and Practice of Nurse Anesthesia I</td>
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<td>NRSA 602 Principles and Practice of Nurse Anesthesia II</td>
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<td>NRSA 603 Principles and Practice of Nurse Anesthesia III</td>
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<tr>
<td>NRSA 647 Professional Aspects of Anesthesia Practice III</td>
<td>1</td>
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<tr>
<td>NRSA 622 Clinical Practicum I</td>
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<td>NRSA 624 Clinical Practicum III</td>
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<td><strong>Total</strong></td>
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**Curriculum – Post-certification CRNA**

Four semesters (16 months)

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<tr>
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<th>Course</th>
<th>Credits</th>
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<td><strong>Fall semester</strong></td>
<td>ALHP 591 Special Topics</td>
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<td>PHTX 515 Pharmacology for Nurse Anesthetists I</td>
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<td></td>
<td>PHIS 501 Mammalian Physiology I</td>
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<td></td>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
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<td><strong>Spring semester</strong></td>
<td>MEDC 532 Medicinal Chemistry for Nurse Anesthetists</td>
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<td>PHTX 516 Pharmacology for Nurse Anesthetists II</td>
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<tr>
<td></td>
<td>NRSA 683 Research Methods in Nurse Anesthesia Practice</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
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### Summer session
- NRSA 633 Pathophysiology for Nurse Anesthetists 3
- NRSA 699 Directed Research in Nurse Anesthesia or NRSA 798 Thesis 2
- ALHP 591 Special Topics 2
- NRSA 676 Teaching Methodologies for the Nurse Anesthetist 2

### Fall semester
- NRSA 699 Directed Research in Nurse Anesthesia or NRSA 798 Thesis 1
- NRSA 574 Teaching in Nurse Anesthesia Programs 2
- NRSA 627 Clinical Practicum IV 6

9
Department of Occupational Therapy

History

The program in occupational therapy was initiated at Richmond Professional Institute in 1942. In 1965, the graduate program leading to a Master of Science degree in basic professional education in occupational therapy was initiated. The School of Occupational Therapy became a department in the School of Allied Health Professions in 1970.

Philosophy

The philosophy of the Department of Occupational Therapy embraces the philosophical base of occupational therapy stated by the American Occupational Therapy Association (1979):

Man is an active being whose development is influenced by the use of purposeful activity. Human beings are able to influence their physical and mental health and their social and physical environment through purposeful activity. Human life is a process of continuous adaptation. Adaptation is a change in function that promotes survival and self-actualization. Biological, psychological and environmental factors may interrupt the adaptation process at any time throughout the life cycle, causing dysfunction. Purposeful activity facilitates the adaptive process. Purposeful activity (occupation), including its interpersonal and environmental components, may be used to prevent and mediate dysfunction and to elicit maximum function. Activity as used by occupational therapists includes both an intrinsic and a therapeutic purpose. (AOTA. [1979]. The philosophical base of occupational therapy. AJOT, 33, 785.)

Mission

The primary mission of the Department of Occupational Therapy is the preparation of excellent, innovative, adaptable and responsible occupational therapists as professional leaders for the state and the nation.

In pursuit of this mission, the department:

- fosters student commitment to scientific inquiry and professional competence, and promotes personal growth, balance and dedication to lifelong learning,
- promotes faculty excellence and collaboration in teaching, scholarship and research that models integrity and competence,
- collaborates with the community through education, consultation and the development of strong linkages with clinical educators and the community, and
- interacts dynamically with the occupational therapy profession and stakeholders, contributing proactively to the evolution of the profession.

**Accreditation**

The professional master’s degree program to become an occupational therapist is accredited by the Accreditation Council for Occupational Therapy Education, 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220; telephone (301) 652-2682.

**Facilities**

The educational facilities of the Department of Occupational Therapy are located in the Virginia Mechanics Institute Building at the northeast corner of 10th and Marshall streets.

During the professional master’s degree program, fieldwork assignments are made for students in a wide range of clinics and agencies in the Richmond metropolitan area. A 24-week extended fieldwork requirement will be arranged in approved clinical education facilities throughout the United States.

**Honors and awards**

**A. D. Williams Award**

An annual award presented to second-year students with cumulative 4.0 GPAs for the entire curriculum.

**Commonwealth of Virginia Graduate Fellowship Award**

These awards are presented to graduate student(s) with high academic and professional potential. Preference is given to residents of Virginia, and financial need is considered.

**Patti Ann Maurer Scholarship**

This award is given to the top-ranked applicant for the professional master’s program.

**Gudger-Garris Scholarship Award**

This award is a bequest from Lucille Gudger. It is awarded each year to students in the occupational therapy program in good academic standing with financial need.

**C.A. Kooiman Memorial Award**

This award is given in memory of C.A. Kooiman, director of the occupational therapy curricula from 1961 to 1976. The award recipient is chosen by the graduating class as the person who best exemplifies the nature and characteristics of Kooiman.
Programs

Two courses of study are offered:

1. A Master of Science in Occupational Therapy program, a professional degree program designed for students who wish to become occupational therapists.

2. A post-professional Master of Science in Occupational Therapy is available for registered occupational therapists.

Academic regulations

Students are admitted to the occupational therapy programs with the expectation that they will direct maximum time and effort to the learning process. Outside activities must be scheduled by students for such dates and hours as permit full compliance with the time requirements for course work. Tardiness, lack of regular attendance or failure to meet deadlines for course assignments will not be excused because of employment or other outside activities.

To continue in the graduate curriculum, students are expected to maintain a cumulative GPA of 3.0 based on course work following matriculation.

- Graduate students who fail to maintain a 3.0 cumulative GPA or receive a grade of “D” (regardless of the cumulative GPA) will automatically be placed on probation and will be notified of probationary status.

- Conditions of probation: students must earn a quality point average during the semester of probation sufficient to result in a cumulative GPA of 3.0 in order to be removed from probationary status.

Students who are on probation due to receiving a “D” grade must retake that course, achieving a grade of “C” or better while also meeting all other academic standards.

Conditions of probation also may include recommendations for academic counseling, assignments by individual instructors and other requirements identified by the Committee on Academic Standing and Student Progress. Conditions of probation will be detailed in a letter of notification of probation prepared by this committee.

Only one semester of academic probation is permitted in the program. If probationary students fail to meet academic standards (GPA of 3.0) in a second semester or do not successfully complete deficient courses, they will be considered for dismissal.

As courses usually are offered only once a year and because early courses serve as prerequisites for later courses, students retaking a course or taking a reduced course load will have to continue under an adjusted curriculum plan. This will result in extending the student’s time in the program.

- Students who receive an “F” grade in any required course will be considered for dismissal by the committee.

- University standards require that a graduate student must not have more than six semester hours or 20 percent of semester hours attempted, whichever is greater, with a grade of “C.” Students who receive a grade of “C” on more than the allowable number of semester hours will be reviewed for possible academic termination by the Committee on Academic Standing and Student Progress. Students who are not terminated for this criterion will be placed on automatic probation.

- If a student withdraws or is terminated by the clinical faculty before the completion of the Level II Fieldwork course, the student will receive an “F” grade for the course.
If the student withdraws, is terminated or fails a fieldwork experience, the course may be repeated only upon approval by the Committee on Academic Standing and Student Progress in consultation with the department chair and the fieldwork coordinator. Students may be dismissed from the program or be allowed to continue contingent upon fulfilling remedial activities based on a plan prepared by the fieldwork coordinator and ratified by the committee. No more than one additional fieldwork experience will be rescheduled. The opportunity to reregister and repeat the fieldwork course is contingent upon the fieldwork coordinator’s ability to locate another facility willing to offer a fieldwork experience to the student and upon the support of the committee. Level II Fieldwork must be completed no later than 24 months subsequent to the completion of the academic phase.

- **To continue in good standing, students also are expected to:**
  - pay all fees,
  - maintain personal attributes and ethical behaviors consistent with professional practice as defined in the Occupational Therapy Department Student Handbook, and
  - complete fieldwork requirements to the satisfaction of clinical and academic faculty.

- Although arrangements are made in advance, each student is reviewed prior to placement in the Level II Fieldwork education. Students must have satisfactorily completed courses prerequisite to that fieldwork experience and be recommended by the faculty. They must demonstrate professional behavior as specified in the ethical behaviors listed in the Occupational Therapy Department Student Handbook. Medical problems may delay or prevent fieldwork placement.
Master of Science in Occupational Therapy

The Department of Occupational Therapy offers a Master of Science in Occupational Therapy, a professional degree program designed for students who wish to become occupational therapists. This program may be completed in eight consecutive semesters. Applications will be accepted from students who have completed at least three year’s of bachelor’s degree course work (90 semester credits). The professional master’s degree program includes academic courses, research activities and a minimum of 24 weeks of full-time fieldwork.

Admission requirements

Applicants for the professional master’s degree program must complete the following prerequisites with a grade of “C” or better (credits are listed in semester credit hours):

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Credits</th>
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<tbody>
<tr>
<td>English</td>
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<tr>
<td>Human Anatomy and Physiology (laboratory courses)</td>
<td>6</td>
</tr>
<tr>
<td>Social sciences</td>
<td>15</td>
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<tr>
<td>Must include:</td>
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<tr>
<td>Life-span development course(s) sufficient to cover entire life span (3-6)</td>
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<tr>
<td>Abnormal psychology (3)</td>
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<tr>
<td>Other social sciences courses (psychology, sociology, social psychology, anthropology) (6-9)</td>
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</tr>
<tr>
<td>Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Computer competence — the ability to use a personal computer for word processing, e-mail, online bibliographic searches and Internet listserv discussion — is required. It is helpful to be familiar with graphics software for preparing presentations.

These are considered minimal prerequisites, and applicants are encouraged to pursue additional study in liberal arts and science courses that develop intellectual competence, enrich interest areas and promote an awareness of the breadth of social and cultural values. To fulfill the human development prerequisite, it is important to read course descriptions carefully, as many courses say they cover the life span but primarily focus on a single area (e.g., childhood). To meet this requirement, students will need courses that prepare across the life span. To fulfill the psychology prerequisite, a course in theories of personality is highly recommended.

Experience in at least two occupational therapy settings is required. Criteria for admission include GPA (overall and prerequisite GPA will be calculated), scores on the GRE and professional
criteria, including experience, references, professional attributes and statement of professional goals. Admission is selective, as the number of applicants often exceeds the number of students who can be enrolled.

Graduates of occupational therapy programs are required to take the national certification examination to become an Occupational Therapist Registered. The national certifying organization for occupational therapy is the National Board for Certification in Occupational Therapy (NBCOT). Other licensure or certification requirements may be established by state organizations. Some licensure or certification agencies consider individuals convicted of a felony ineligible for licensure or certification. For specific information, prospective students should contact the licensure or certification agency for occupational therapy.

Application forms and instructions for applying to all graduate programs are available on the Graduate School Web site.

University tuition and fees apply. Additional departmental course fees are calculated each semester to cover materials and supplies. Semester course fees vary but rarely exceed $75 per semester. Fees will not exceed $100 each semester, per departmental policy.

Curriculum plan

The total program is planned for completion in eight semesters of full-time study and encompasses academic and fieldwork education as well as a research project.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
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<tr>
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<td>OCCT 521 Neuroscience Applications to Occupational Therapy</td>
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<td>OCCT 531 Nature of Occupational Therapy and Therapeutic Communication</td>
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<td>OCCT 532 Life Span Occupational Development</td>
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<td>OCCT 533 Occupational Therapy Principles, Values and Theories</td>
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<td>OCCT 620 Occupational Therapy Practice Activities I</td>
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<td>OCCT 534 Occupational Therapy Evaluation and Intervention Overview</td>
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<td>OCCT 630 Adult Evaluation and Intervention I: Foundations</td>
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<td>OCCT 635 Psychosocial Evaluation and Intervention I</td>
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<td>OCCT 640 Pediatric Evaluation and Intervention I: Infant and Preschool Children</td>
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<td>OCCT 660 (Section 001) Level I Fieldwork in Occupational Therapy</td>
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Fall II
OCCT 621 Occupational Therapy Practice Activities II 1
OCCT 631 Adult Evaluation and Intervention II: Activities of Daily Living 2
OCCT 636 Psychosocial Evaluation and Intervention II 2
OCCT 641 Pediatric Evaluation and Intervention II: Ages 6-Adolescence 4
OCCT 660 (Section 002) Level I Fieldwork in Occupational Therapy 1
OCCT 709 Research Process and Statistical Analysis in Occupational Therapy 4

Spring II
OCCT 623 Occupational Therapy Practice Activities III 1
OCCT 632 Adult Evaluation and Intervention III: Work, Play/Leisure, Geriatrics 2
OCCT 650 Occupational Therapy in Health Care 3
OCCT 651 Administration and Supervision of Occupational Therapy Services 3
OCCT 670 Case Based Reasoning in Occupational Therapy 2
OCCT 729 Research Practicum 3

Summer III
OCCT 680 Level II Fieldwork in Occupational Therapy 9

Fall III
OCCT 681 Level II Fieldwork in Occupational Therapy 9

Total credits in program 81.5

Upon successful completion of the program, students are eligible to take the national certification examination. Certification is required by most employers as proof of professional competence.

For additional information, visit the Department of Occupational Therapy Web site.
The Department of Occupational Therapy offers a post-professional Master of Science in Occupational Therapy program that is available for registered occupational therapists. It is a distance education program combining Internet-based course work with brief intensive on-site instructional periods. A minimum of 33 semester hours, including a thesis, is required.

Admission requirements

Applicants must have earned a bachelor’s degree from an accredited college or university and be certified by the National Board of Certification in Occupational Therapy, Inc. An official report of scores on the GRE is required.

Application forms and instructions for applying to all graduate programs are available on the Graduate School Web site.

Purpose

The Post-professional Master of Science in Occupational Therapy provides bachelor’s-degreed, registered occupational therapists with opportunities to develop advanced clinical problem-solving skills and abstract reasoning. Upon program completion, the student should have increased ability to:

- provide theory and evidence-based practice,
- engage in advanced clinical program solving,
- use research skills to assist in developing new clinical knowledge and in program evaluation, and
- fulfill expanded roles, and seek out and create roles in new settings.

Program

The program is primarily a Web-based distance education program, with limited intensive on-campus course work for some courses with the remainder of the semester’s work in either a computer- or video-based format. This program follows the traditional fall, spring and summer semester schedule. It consists of theory and research core courses, electives for concentrated study, and six credits of thesis research. Students should enter the program with a concentration and research interest identified. Concentration areas currently available include gerontology and pediatrics. Up to six credits of electives may be taken at other institutions and transferred in, with permission of adviser. The curriculum includes the following 33 credit hours of courses:
<table>
<thead>
<tr>
<th>Theory core</th>
<th>credits</th>
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<tbody>
<tr>
<td>OCCT 671 Advanced Theory in Occupational Therapy</td>
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<tr>
<td>OCCT 672 Dimensions of Occupation</td>
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</tr>
<tr>
<td>OCCT 673 Health Care Delivery and Occupational Therapy Practice Models</td>
<td>3</td>
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<tr>
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<tr>
<td>Research core</td>
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</tr>
<tr>
<td>OCCT 710 Research Process in Occupational Therapy</td>
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<tr>
<td>OCCT 711 Research Process in Occupational Therapy: Qualitative Methods</td>
<td>3</td>
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<tr>
<td>Statistics (taken outside the department)</td>
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<tr>
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<tr>
<td>Thesis</td>
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<tr>
<td>OCCT 798 Thesis</td>
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<tr>
<td>OCCT 799 Thesis</td>
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<td></td>
<td>9</td>
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<tr>
<td>Concentration course options</td>
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<td>(courses outside department may be taken, with approval)</td>
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<tr>
<td>OCCT 654 Advanced Assistive Technology Applications in Occupational Therapy: Children and Young Adult (3)</td>
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<td>OCCT 655 Older Adult Advanced Assistive Technology Application in Occupational Therapy (3)</td>
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<td>OCCT 656 Advanced Neuroscience Applications in Occupational Therapy (3)</td>
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<tr>
<td>OCCT 661 School-based Therapy (3)</td>
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<tr>
<td>OCCT 662 Neuroscience Review and Sensory Integration Theory (3)</td>
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<tr>
<td>OCCT 663 Beyond the Basics: Advanced Evaluation and Intervention in Pediatric Occupational Therapy (3)</td>
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<td>OCCT 690 Occupational Therapy Seminar (1-3)</td>
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<td>OCCT 691 Special Topics in Occupational Therapy (3)</td>
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<td>OCCT 697 Independent Study (3)</td>
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<tr>
<td>OCCT 793 Clinical Specialty Practicum (3)</td>
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<tr>
<td>Gerontology courses</td>
<td></td>
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<td></td>
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</tbody>
</table>

The program is designed to permit part- or full-time study. Courses are generally taught once yearly.

For additional information, visit the Department of Occupational Therapy Web site.
The departments of Occupational Therapy and Gerontology have developed a specialized version of the Certificate in Aging Studies program for students completing the post-professional Master of Science in Occupational Therapy. Students must meet admission requirements for the occupational therapy degree and the gerontology certificate program. The student is required to complete the following courses:

- GRTY 601 Biological and Physiological Aging 3 credits
- GRTY 602 Psychology of Aging 3
- GRTY 605 Social Gerontology 3
- GRTY 792 Independent Study Project in Gerontology 3
- GRTY elective – Any additional elective course in gerontology with approval of both the occupational therapy adviser and the gerontology department’s adviser. 3
- OCCT 655 Older Adult Advanced Assistive Technology Application in Occupational Therapy 3

Contact the respective departments for additional curriculum information.
Program in Patient Counseling

History

Patient counseling is the practice of communicating emphatic concern, support and sensitive spiritual counsel to the physically or emotionally troubled person in the traumas of life. There is a long history of a concerted effort toward this end at the VCU Health System. With the appointment of Dr. George D. Ossman as chaplain in 1943, the administration gave clear evidence of its awareness of the need for a specialized caring ministry to hospitalized patients and their families.

The chaplaincy program was significantly expanded in 1958 and was accredited to begin the education and clinical training of persons in patient counseling. Since then, a continuous program has been in existence and has evolved into the present program in patient counseling. Patient counseling, as it exists today, became an integrated program in the School of Allied Health Professions in 1970. A comprehensive curriculum review was completed in 1999.

Philosophy

With the rapid growth of health care and the increasingly complex problems of medical ethics and viable delivery systems, it is very important to educate qualified persons to deal with the human dimensions of illness as well as the personal and family stressors related to it. Through this program, VCU has an opportunity to make an impact upon health care education by emphasizing the spiritual dimension of human needs in life crises. By so doing, this university has a significant role to play in the important task of keeping health care holistic and utilizing technical and scientific methodology in the context of a deep respect for the total life of persons.

Objectives

The Program in Patient Counseling is designed to assist an individual to work in the health field as one skilled in dealing with the whole person in the context of life’s crises and in a cooperative interprofessional team approach. It is offered to persons who have an existing identity in a helping or counseling profession. This includes clergy, social workers, institutional counselors, education specialists, psychologists, community health workers and others in the health care professions.

Facilities
West Hospital (N2S) is the base for the educational program, and limited space is available in clinical areas to work with persons and families in crisis. The Main Hospital, mezzanine level, contains the chapel, family consultation room and administrative offices.

**Accreditation**

The program is accredited by the Association for Clinical Pastoral Education, Incorporated. It is offered in collaboration with the VCU Health System.

**Code of ethics**

The professional behavior of the student is expected to be in accordance with the Code of Professional Ethics, as adopted by the Association for Clinical Pastoral Education, Inc. and the Code of Ethics of the Association of Professional Chaplains.

**Programs**

Students serve in the dual capacity of providing pastoral care service while learning. Extensive clinical involvement, including night and weekend responsibilities, is required for selected courses and clinical pastoral education credit. Each student receives individual supervision by a member of the faculty.

- Intern Certificate
- Post-baccalaureate Graduate Certificate in Patient Counseling
- Master of Science in Patient Counseling

Students who are unsuccessful in demonstrating completion of designated clinical pastoral education outcomes in any program will be required to develop with a faculty mentor an individualized plan of study toward their completion. Typically, this plan will be accomplished through additional course work or a directed independent study.

**Continuation requirements, advising, transfer and part-time status**

A student must maintain a minimum GPA of 3.0 in all course work completed at VCU. A student who falls below that minimum will have one semester to remedy the deficiency.

A student must register for at least one credit hour each academic year for continuation in the program. Any student who fails to register must have prior approval to do so or be dropped from the program and must reapply for reinstatement.

There is a five calendar-year maximum for students to complete the Master of Science degree and a seven calendar-year maximum for the dual degree. The graduate certificate program must be completed within a four calendar-year maximum. Part-time students who wish to accumulate concurrent ACPE credit need to be sure that course work is completed in accordance with ACPE standards.
A maximum of eight credits may be transferred from another university toward the Master of Science course requirements provided these credits have not been applied to a previous degree. A maximum of one-third of the didactic hours may be transferred from another VCU program. Dual degree candidates may apply six credits from their seminary studies to the VCU degree. Transfer is given at the discretion of the chair after consultation with the faculty, subject to university approval. Credits are not transferable to either of the certificate programs.

Students who have been admitted to the graduate certificate program may be admitted to the master of science degree with advanced standing after the completion of at least 18 credits with a “B” or better. All credits of a “B” or better will transfer to the degree program.

Upon admission to all programs students will be assigned a faculty adviser.
The Intern Certificate is designed to meet the outcomes of Level I Clinical Pastoral Education. This certificate is granted upon the satisfactory completion of PATC 515 or an approved equivalency of courses completed in no more than two consecutive semesters. Programs are offered in the fall, spring and summer semesters.

**Admission requirements**

- Bachelor of Arts or its equivalent;
- completed VCU graduate application;
- supplemental ACPE application materials; and
- personal interview with a member of the faculty or an approved substitute.

**Curriculum**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PATC 515 Basic Patient Counseling</td>
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</table>
Post-baccalaureate Graduate Certificate in Patient Counseling

The graduate certificate requires the completion of 27 credit hours of study according to one of the established curricula. Course substitutions require faculty approval.

Final granting of the graduate certificate requires an oral review with the faculty demonstrating completion of outcomes for Level II Clinical Pastoral Education or Supervisory Clinical Pastoral Education as determined by the chosen track of study.

Admission requirements

- Bachelor of Arts or its equivalent;
- a graduate degree in a health-related field or two years of graduate theological education;
- completed VCU graduate application;
- supplemental ACPE application materials;
- demonstrated completion of Level I Clinical Pastoral Education; and
- personal interview with the faculty.

Curriculum

<table>
<thead>
<tr>
<th>Year I</th>
<th>summer</th>
<th>fall</th>
<th>spring</th>
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<tbody>
<tr>
<td>PATC 555 Theory and Practice of Patient Counseling I</td>
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<td>PATC 561 Group Process I</td>
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<tr>
<td>Elective</td>
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<td>PATC 556 Theory and Practice of Patient Counseling II</td>
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<tr>
<th>Year II</th>
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<tbody>
<tr>
<td>PATC 609 Supervised Clinical Practice I</td>
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<tr>
<td>PATC 601 Theory of Group Leadership</td>
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<tr>
<td>PATC 639 Pastoral Care Management</td>
<td>2</td>
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</table>
School of Allied Health Professions

Master of Science in Patient Counseling

The Master of Science requires 44 credit hours of study according to one of the established curricula. Course substitutions require faculty approval.

Final granting of the Master of Science requires an oral review with the faculty demonstrating completion of outcomes for Level II Clinical Pastoral Education or Supervisory Clinical Pastoral Education as determined by the chosen track of study.

Admission requirements

- Bachelor of Arts or its equivalent;
- completed graduate application;
- supplemental ACPE application materials;
- submission of the Graduate Record Examination or at least one year of graduate education with a GPA of "B" or better; and
- personal interview with faculty.

International students should submit scores at an acceptable level (minimum of 550) on the TOEFL and give additional evidence of ability to communicate in English with faculty for admission to the graduate certificate and Master of Science programs.

Students seeking concurrent positions as pastoral care residents at the VCU Health System should contact the department directly. Applicants for resident positions should have completed two years of graduate theological education or a graduate degree in a health-related field with demonstrated background in theological studies and Level I Clinical Pastoral Education in an ACPE accredited center.

Curriculum

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<td>PATC 635 Clinical Ethics</td>
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<td>PATC 635 Clinical Ethics</td>
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<td>PATC 556 Theory and Practice of Patient Counseling II</td>
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<td><strong>Year II</strong></td>
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<tr>
<td>PATC 609 Supervised Clinical Practice I</td>
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<td>Course</td>
<td>Credits</td>
<td>Notes</td>
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History

The Department of Physical Therapy was established in 1945 to provide basic preparation for the practice of physical therapy. Between 1945 and 1954, the program consisted of a 12-month professional course designed to train students for entry into the profession. This program was based upon at least three years of college work or the possession of a registered nurse certificate. A two-year professional program after two years of preparatory college work was initiated in 1954. This program led to the degree of Bachelor of Science in Physical Therapy. In 1968, the Department of Physical Therapy became part of the School of Allied Health Professions. The two-year professional program leading to the Bachelor of Science degree continued through the 1988-89 academic year.

In August 1989, the Department of Physical Therapy, School of Allied Health Professions, began a three-year professional program based on three years of previous college work that leads to a Master of Science degree. On Feb. 8, 2001 the VCU Board of Visitors approved a proposal to offer a Doctor of Physical Therapy as the entry-level professional degree. The State Council of Higher Education in Virginia gave its final approval for the proposal on June 20, 2001. The first class to study the professional program began in July 2002.

In addition to the professional program, the department participates in four collaborative and interdisciplinary Ph.D. programs.

Mission

The Department of Physical Therapy serves the people of the commonwealth of Virginia and the nation by providing educational programs related to physical therapy. The department provides an environment that encourages education through problem solving, free inquiry, professional behavior and scholarship. The department's primary focus is to prepare individuals for general physical therapy practice. These practitioners are educated to serve as an entry point into the health care system for consumers. Post-professional programs provide quality education leading to careers in teaching and research. The department also provides assistance and services to the community and engages in research and scholarly activities related to the practice of physical therapy.

Philosophy
Physical therapy is an integral part of the health care system. Expanding knowledge in the basic and clinical sciences, and changes in the needs and mandates of society, continually place new demands on the physical therapy profession. The faculty of the Department of Physical Therapy is committed to providing educational programs responsive to expanding knowledge and the needs of society.

The primary principle directing the activities of the department is the faculty’s commitment to optimal patient care through physical therapy education, research and practice. The faculty strongly believes that physical therapists must have a thorough understanding of the theoretical bases for treatment and skills in problem solving, evaluation and communication.

The faculty also believes that physical therapists have a responsibility to develop skills for lifelong learning (e.g., the ability to find information and to critically analyze that information).

The faculty also is committed to the development and sharing of new knowledge in the field of physical therapy through scholarship and research.

**Objectives**

The objectives of the Department of Physical Therapy, in concert with the mission of the university and the School of Allied Health Professions, are to:

- provide an entry-level post-baccalaureate educational program for full-time students with diverse backgrounds and experiences,
- contribute to interdisciplinary post-professional doctoral programs that prepare physical therapists to contribute to the understanding and application of therapeutic procedures through basic and applied research and to teach both clinical and didactic physical therapy on all academic levels,
- provide an atmosphere that fosters critical thinking, intellectual curiosity and integrity, freedom of expression, personal growth and professional competence, and a commitment to learning for faculty and students,
- provide an environment that facilitates research and scholarship directed toward optimizing patient care, and
- provide services to the public and professional communities.

**Facilities**

The educational facilities for the Department of Physical Therapy are located on the basement floor of A.D. Williams/West Hospital. These buildings, located on the northeast corner of 12th and Broad streets, house administrative and faculty offices, classrooms, physical therapy instructional, computer and research laboratories, and student locker rooms. Classrooms in other buildings on the MCV Campus are used as needed.

Clinical education experiences for professional students are offered in physical therapy clinics throughout Virginia and the country.
The Department of Physical Therapy is committed to improving physical therapy services through graduate education and research. The department participates in several cooperative and interdisciplinary doctoral programs. Physical therapy tracks are offered in the Ph.D. programs of the Department of Anatomy and Neurobiology and the Department of Physiology. An interdisciplinary Ph.D. in Rehabilitation and Movement Science is offered in conjunction with two other departments at VCU: Department of Exercise Science in the School of Education and the Department of Physical Medicine and Rehabilitation in the School of Medicine. Also, the department participates in the School of Allied Health Professions’ Ph.D. in Health Related Sciences.

Education at the Ph.D. level is a highly independent adventure. The curricula offered by the Department of Physical Therapy through joint ventures with other departments allow students the opportunity to focus on highly divergent aspects of research related to physical therapy. Each of the programs also offers students opportunity to hone teaching skills in preparation for a well-rounded academic career.

Regardless of the chosen program or track, each Ph.D. student conducts a substantial original research project. Individuals interested in doctoral education are encouraged to examine the research interest areas of faculty in each of the participating departments and to consult with the program directors before submitting their application to a specific program.

### Admission requirements

Applications are encouraged from individuals who are practicing physical therapists. Applicants must have graduated from a physical therapy educational program approved by the American Physical Therapy Association. International students must have an equivalent level of education as determined by the Office of International Admissions. Individuals who are not physical therapists are not accepted into the advanced degree programs.

Additional admission requirements for graduate study in the Department of Physical Therapy are as follows:

1. a minimum GPA of 2.7 on a 4.0 scale for entry-level professional education,
2. satisfactory score on the general test of the GRE (taken no more than five years prior to admission),
3. three satisfactory letters of recommendation,
4. applicant’s written statement of intent for pursuing graduate studies in a particular program, and
5. such additional requirements as established for each specific program.

International students also must score a 600 or above on the Test of English as a Foreign Language (TOEFL) (250 on computer-based test).

**Financial assistance**

Some teaching and research assistantships are available from the Department of Physical Therapy. These assistantships are competitive, with doctoral students given first priority. Part-time employment as a physical therapy clinician is available in Richmond and surrounding areas. Doctoral students receiving stipends must receive approval of outside employment. VCU provides three types of student assistance: scholarships, loans, and work study. For information on these types of financial assistance, write to the Office of Financial Aid, Virginia Commonwealth University, MCV Campus, Richmond, VA 23298-0244.

Priority consideration is given to applications received by Jan. 7.

**Doctor of Philosophy programs**

**Physical therapy tracks within the Anatomy and Neurobiology and Physiology programs**

The departments of Anatomy and Neurobiology and Physiology of the School of Medicine, together with the Department of Physical Therapy of the School of Allied Health Professions offers Ph.D. programs in anatomy-physical therapy and physiology-physical therapy. The goals of the doctoral programs are to train students in research and educational skills in preparation for students to function as physical therapy faculty members. Application is made to either the Department of Anatomy and Neurobiology or the Department of Physiology. Acceptance into either of the programs requires approval by the admission committees of the cooperating departments.

Students in the Anatomy/Physical Therapy Doctoral Program take required courses within the departments of Anatomy and Neurobiology and Physical Therapy. Students in the Physiology/Physical Therapy Program take required courses within the departments of Physiology and Physical Therapy. (Other courses may be required by the student’s dissertation committee.) In both programs, the student plans and conducts a research study generally under the direction of a faculty member of the Department of Physical Therapy; however, the dissertation adviser may be from either of the two primary departments. In addition, the student is required to assist in teaching three courses.

**Admission requirements**

In addition to the requirements listed above, admission to either the anatomy/physical therapy or physiology/physical therapy programs requires:

- a minimum of a bachelor’s degree,
- graduation from an accredited program in physical therapy (or equivalent, if trained
outside the United States) and

- demonstrated clinical experience in physical therapy.

Applicants to the physiology/physical therapy program also are encouraged to have completed at least one course in organic chemistry. Applicants should refer to the departmental Web site for more information or contact:

Dr. Sheryl Finucane, Director of Graduate Studies
Department of Physical Therapy
School of Allied Health Professions
Virginia Commonwealth University
P.O. Box 980224
Richmond, VA 23298-0224
Phone: (804) 828-0234

For additional information about the collaborating departments, refer to their Web sites:

- Department of Physical Therapy
- Department of Anatomy and Neurobiology
- Department of Physiology
Ph.D. in Rehabilitation and Movement Science

Ph.D. in Rehabilitation and Movement Science is an interdisciplinary degree program developed through a collaborative partnership of the departments of Exercise Science, Physical Therapy, and Physical Medicine and Rehabilitation. The mission of this collaborative degree program is to prepare applied scientists capable of approaching multifaceted health care, preventive medicine and rehabilitation initiatives from an integrative rather than competitive perspective, and to prepare graduates to assume leadership positions in higher education teaching, research and management within rehabilitation and movement science.

There are two program tracks: cardiopulmonary and neuromusculoskeletal dynamics. The cardiopulmonary track prepares individuals to teach, conduct research and direct external funding initiatives in the area of cardiopulmonary rehabilitation and physiology, particularly in areas associated with metabolic and chronic disease states. The neuromusculoskeletal dynamics track prepares individuals for teaching, research and clinical initiatives associated with the identification and rehabilitation of movement disorders.

Admission requirements

Admission decisions are made by an admissions committee comprised of faculty members from each of the major collaborating departments: Exercise Science, Physical Therapy and Physical Medicine and Rehabilitation. Applicants must have completed at least one of the following: a master’s degree in a related area, 30 hours of post-baccalaureate work (e.g. course work at 500 level or greater), or a first professional degree program. Admission decisions are made only on the basis of a completed application packet.

Applicants for admission to the program must complete an admission packet that includes the VCU Application for Graduate Study as well as supplementary program materials. Admission packets are available from:

Graduate School
Virginia Commonwealth University
Moseley House
P.O. Box 843051
Richmond, VA 23284-3051
http://www.vcu.edu/graduate
The entrance requirements fall into the following three categories. All criteria must be completed for consideration for admission.

**Academic criteria**

- A completed VCU Graduate School Application.
- Two official and up-to-date copies of all transcripts of the applicant’s undergraduate and graduate record indicating that the applicant has completed the minimum required prerequisite course work.
- Official and current scores (within the past five years) for the general test of the GRE. Older scores may be submitted and consideration will be based upon the time elapsed since last formal schooling, occupation success and research ability.
- Priority for admission will be given to the applicants who have attained at least 3.5 in all graduate work attempted and a combined verbal and quantitative score on the GRE of a minimum of 1,000. If the TOEFL is required, a minimum of 600 is expected.

**External criteria**

- A professional resume indicating an applicant’s educational and career experience as well as evidence of research potential.
- Completed reference forms from three individuals capable of evaluating the applicant’s academic and research potential.

**Written expression**

- A personal statement in which the applicant discusses his or her personal career goals and the manner in which this doctoral program would enhance those goals.
- A summary of motivation, education and aims in pursuing an interdisciplinary degree in rehabilitation and movement science.

Applicants being considered for admission must complete an interview with a Ph.D. admissions committee representative and/or research faculty member with whom the student would like to work.

The applicant is encouraged to check the status of his or her application packet to ensure that all components of the packet have been received. Inquiries should be made to the Office of Graduate Studies in Education. The Admissions Committee will not review incomplete packets.

**Transfer credit**

Students in the program may transfer up to nine credit hours into the program, including courses
taken at VCU prior to being admitted to the program. Note that credits earned for one degree cannot be applied to another degree.

**Curriculum**

The Ph.D. in Rehabilitation and Movement Science will require a minimum of 36 credit hours of course work and 12 credit hours of dissertation research. Students will be required to complete:

- 12 credit hours of research core courses comprised of a research design class, two classes in statistical application and an elective in the area of research design or statistics;
- 18 credit hours in a concentration comprised of a focus on course work in a specific discipline formulated with the major adviser and approved by the Admissions Committee of the degree program;
- three credit hours comprised of laboratory rotations in a minimum of two laboratories within the Rehabilitation and Movement Science program; each credit hour requires a minimum of 50 contact hours in the laboratory selected;
- three credit hours of professional development comprised of an interdisciplinary research/journal club seminar (one credit hour), a teaching practicum (one credit hour) and a presentation delivered at a regional, national or international conference of a related discipline (one credit hour);
- 12 credit hours of dissertation research comprised of a focused line of research over a three-to-four-year period of doctoral work.

Required research courses for the program (nine credit hours) – both tracks:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 543</td>
<td>Statistical Methods I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 544</td>
<td>Statistical Methods II</td>
<td>3</td>
</tr>
<tr>
<td>ALHP 761</td>
<td>Health Related Sciences Research Design</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(or other approved course in research design)</td>
<td></td>
</tr>
</tbody>
</table>

Approved research design alternatives:

- HADM 761 Health Services Research Methods I 3
- SOCY 602 Applications of Advanced Research Methods 3
- EDUS 710 Educational Research Design 3

Elective research courses for the program (three credit hours) – both tracks:

<table>
<thead>
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<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOS 531</td>
<td>Clinical Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 553-554</td>
<td>Applied Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 571</td>
<td>Clinical Trials</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 572</td>
<td>Statistical Analysis of Biomedical Data</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 655</td>
<td>Quantitative Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>ALHP 716</td>
<td>Grant Writing and Project Management in Health Related Sciences (or elective research course in consultation with adviser)</td>
<td>3</td>
</tr>
</tbody>
</table>

Required concentration courses for the Ph.D. program tracks
<table>
<thead>
<tr>
<th>Cardiopulmonary track</th>
<th>credits</th>
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<tbody>
<tr>
<td>PHIS 512 Cardiovascular Exercise Physiology</td>
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</tr>
<tr>
<td>PHIS 604 Cell Physiology</td>
<td>4</td>
</tr>
<tr>
<td>PHIS 612 Cardiovascular Physiology</td>
<td>3</td>
</tr>
<tr>
<td>REMS/HEMS 601 Movement Physiology</td>
<td>3</td>
</tr>
<tr>
<td>REMS/HEMS 610* Laboratory Techniques in Rehabilitation and Movement Science</td>
<td>3</td>
</tr>
<tr>
<td>REMS/HEMS 675 Clinical Exercise Physiology</td>
<td>3</td>
</tr>
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<td><strong>Total</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Neuromusculoskeletal dynamics track</th>
<th>credits</th>
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<tbody>
<tr>
<td>(select 18 credits from the following):</td>
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</tr>
<tr>
<td>REMS/HEMS 611 Biomechanics of Human Motion</td>
<td>3</td>
</tr>
<tr>
<td>REMS/HEMS 660 Neuromuscular Performance</td>
<td>3</td>
</tr>
<tr>
<td>REMS 665 Instrumentation in Motion Analysis</td>
<td>3</td>
</tr>
<tr>
<td>PHTY 602 Advanced Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHTY 605 Foundations of Pathokinesiology</td>
<td>3</td>
</tr>
<tr>
<td>PHTY 606 Therapeutic Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>PHTY 608 Advanced Musculoskeletal Sciences</td>
<td>3</td>
</tr>
<tr>
<td>REMS/HEMS 692 Independent Study or elective course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Laboratory rotations</strong> (three credit hours) – both tracks:</td>
<td></td>
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<tr>
<td>REMS 710 Research Techniques in Rehabilitation and Movement Science</td>
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</table>

<table>
<thead>
<tr>
<th>Professional development core</th>
<th>credits</th>
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<tbody>
<tr>
<td>(three credit hours) – both tracks</td>
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<tr>
<td>REMS 690 Research Seminar in Rehabilitation and Movement Science</td>
<td>1</td>
</tr>
<tr>
<td>REMS 793 Teaching Practicum in Higher Education</td>
<td>1</td>
</tr>
<tr>
<td>REMS 794 Research Presentation Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research in rehabilitation and movement science</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>(12 credit hours) – both tracks</td>
<td></td>
</tr>
<tr>
<td>REMS 798 Research in Rehabilitation and Movement Science</td>
<td>12</td>
</tr>
</tbody>
</table>

### Advisory committee

**Adviser**

Incoming students will identify a faculty member in the program with whom they would like to pursue their academic program and research endeavors. Every effort will be made to accommodate the student’s first choice of a faculty adviser. If the student is unsure of a research interest and adviser selection, the Admissions Committee will assign an adviser. Within the first two semesters of attendance, a permanent adviser should be identified. The adviser, together with the student, will develop a plan of study for the student’s didactic and scholarly program and will be responsible for guiding the student’s academic progress such that the adviser will supervise the student’s research work and dissertation preparation.
Advisory committee

The student, in consultation with the adviser, will identify faculty members to serve on the advisory committee. The committee shall be appointed no later than the end of the spring semester following matriculation into the program. The student’s advisory committee shall be comprised of five faculty members to include the adviser, two members from the rehabilitation and movement science faculty and two faculty members from other related departments. The student’s adviser, who is active in the field of research the student has selected, will chair the committee.

Comprehensive examination

Once core courses are successfully completed, students must pass written and oral comprehensive examinations before transitioning to candidacy. These examinations will test students on their basic knowledge of rehabilitation and movement science principles (primarily in their chosen track) and research methods as obtained through core, research and elective courses of the curriculum. The student must demonstrate a firm grasp of the material and the potential to become an independent researcher.

The written exam will be given to students during their second spring semester in the program. The written exam will consist of an area paper pertinent to the student’s area of interest. The student’s adviser and advisory committee must approve the topic and an outline of the area paper. The student’s adviser is responsible for grading the area paper. If a student receives a less than satisfactory grade on the area paper, he/she will be afforded the opportunity to make appropriate revisions. Students will only be allowed to revise the area paper once. The area paper should be a minimum of 15 double-spaced pages in 12-point font. The area paper must be in a form suitable for submission for publication to a journal whose content addresses topics consistent with the area paper. The student’s adviser and advisory committee must approve the journal selection and manuscript prior to submission. A passing grade on the written exam is not contingent upon the manuscript being accepted for publication.

Following acceptance of the area paper, the student will write a research proposal. The structure of the proposal will follow federal grant submission guidelines such as those specified by the National Institutes of Health or the Centers for Disease Control. The analytical research proposal must be submitted to and approved by the student’s advisory committee prior to the oral examination.

The oral exam should be conducted within three to six months of successful completion of the written exam with the goal of proceeding to candidacy by the end of the fall semester of the student’s third year. The oral exam will be based on, but not primarily limited to, the student’s proposed analytical research project. The student must receive a satisfactory grade from each committee member to pass the oral exam. The student may proceed to candidacy and begin the research outline in the proposal once successful completion of the oral examination is achieved.

Exit requirements

Dissertation defense
Upon completion of all required course work and the research project, the student must prepare a dissertation to describe the research. A dissertation manual is available for download from the VCU Web site. Students are highly encouraged to become familiar with this manual and use it as a guide for preparation of their dissertation. All committee members must approve the written dissertation and the student must orally defend this dissertation in a publicly advertised seminar prior to graduation.

Students are expected to meet all university graduate school requirements regarding minimal GPA and limitation on credits achieved with a grade of “C” or below.

**Time to degree**

The doctoral degree must be obtained within seven years of matriculation. It is expected that full-time students will satisfy all requirements within four to five years. Part-time students may take the full seven years to complete all courses and the research project.
School of Allied Health Professions

Doctor of Physical Therapy

The goal of this program is to provide a quality educational program that prepares students for entry into the profession of physical therapy. The program prepares students to evaluate and manage patients with physical therapy problems effectively and in accordance with ethical principles. The program also provides students with strategies to continually define and meet their own educational needs in order to keep skills and knowledge current throughout their professional careers. Upon completion of the program, students are awarded a Doctor of Physical Therapy degree.

Objectives

Satisfactory performance in the educational experiences provided in the Doctor of Physical Therapy program prepares the graduate to:

- within the scope of physical therapy practice, effectively examine, evaluate, diagnose and determine the prognosis of individuals with impairments, functional limitations and disabilities.
- within the domain of physical therapy practice, apply health promotion principles and practices in primary, secondary and tertiary prevention.
- manage physical therapy problems in a safe, ethical, legal and professional manner.
- use appropriate educational principles to design methods to teach patients/clients, caregivers, colleagues and other health care professionals.
- effectively manage changes in the physical function and health status of patients/clients.
- collaborate with other health care practitioners to achieve the optimum delivery of health care.
- select and implement safe and effective physical therapy interventions and assess the subsequent outcomes.
- determine the need for further examination or consultation by another physical therapist or for referral to another health care professional.
- manage human and material resources and services to provide high quality and cost effective physical therapy services in diverse settings.
- apply concepts and principles of management to effectively supervise support personnel to whom tasks have been delegated.
- effectively document patient information and physical therapy services to colleagues in an organized, logical and concise manner.
- integrate basic principles of critical inquiry to evaluate, interpret and utilize professional literature in clinical practice, participate in clinical research activities and critically analyze new concepts in the application of physical therapy practice.
effectively communicate, verbally and non-verbally, with patients and their caregivers, health care personnel and members of the community.

demonstrate an awareness of the influence of social, economic, legislative and demographic factors of the delivery of health care.

demonstrate an understanding of the importance of lifelong learning and a commitment to the physical therapy profession.

Accreditation

The professional physical therapy program is accredited by the Commission on Accreditation in Physical Therapy Education, American Physical Therapy Association.

Academic admission requirements for the Doctor of Physical Therapy Program

Prerequisites for admission to the professional Doctor of Physical Therapy program include a Bachelor of Arts or Science degree from an accredited college or university. A grade of "D" in any required prerequisite course is not acceptable. A minimum GPA of 2.7 (in a 4.0 system) is required to be considered for admission. The GRE is required; the scores should be reported directly to Virginia Commonwealth University. For non-native English-speaking applicants, regardless of immigration status, a Test of English as a Foreign Language (TOEFL) score of at least 600 (score of 250 on computerized exam) is required; scores should be reported directly to Virginia Commonwealth University. The program of study necessary to be considered for admission to the professional Doctor of Physical Therapy program must include a minimum of the following subject areas:

- English: six semester hours. Advanced placement or CLEP credits may not be substituted. Courses in literature and one course in composition or scientific writing are strongly recommended.

- Biological sciences: 12 semester hours including laboratory experience. Must include one course in human physiology; an exercise physiology course is not an acceptable substitute for a human physiology course. May include general biology or general zoology. No more than four credits in botany may be applied to meet this requirement. Advanced placement or CLEP credits may not be used to meet these prerequisites.

- Chemistry: eight semester hours of general chemistry with laboratory. CLEP credits may be used to meet these prerequisites.

- Physics: eight semester hours of general physics with laboratory experiences. Courses that emphasize mechanics, electricity, heat and light are highly recommended. CLEP credits may be used to meet these prerequisites.

- Mathematics: three semester hours. These credits must be in trigonometry, calculus or equivalent. Advanced placement or CLEP credits may be used to meet these prerequisites.

- Statistics: three semester hours.

- Psychology: six semester hours. One course in abnormal psychology and one course in human growth and development are required. Advanced placement or CLEP credits may be used to meet these prerequisites.

- Social sciences: six semester hours in social sciences such as sociology, economics, anthropology, history, etc. Advanced placement or CLEP credits may be used to meet these prerequisites.
• Humanities: three semester hours. A course in speech/public speaking and a course in philosophy (ethics is recommended) are required.

At least eight hours of electives must be upper-level courses. In order to complete the social science, psychology and humanities requirements, students are encouraged to choose courses from the following categories: personality development, psychology of adjustment, sociology, anthropology, economics, history, philosophy or logic, counseling, human relations, and public speaking.

In order to complete the total requirements, students are encouraged to elect courses from the following categories: computer science, embryology, histology, cell biology, comparative anatomy, kinesiology, exercise physiology, foreign languages and courses in physical education dealing with an analytical approach to human movement or motor learning.

Students are required to have current CPR certification. One of the three required letters of recommendation should be from a physical therapist.

Application deadlines

All applicants to the program are encouraged to submit a completed application as soon as possible beginning Nov. 1. Acceptance decisions will begin Nov. 15. The final deadline for applications is Feb. 1. All acceptance decisions will be made by April 1.

Curriculum plan for the professional Doctor of Physical Therapy program

First professional year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>Summer semester one</td>
<td>PHTY 501 Gross Anatomy</td>
<td>7</td>
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<tr>
<td>Fall semester</td>
<td>PHTY 502 Kinesiology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHTY 512 Professional Aspects of Physical Therapy</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PHTY 505 Applied Microscopic Anatomy for Physical Therapists</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHTY 510 Rehabilitation I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHTY 531 Scientific Inquiry</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PHTY 516 Topic in Health Care Services and Delivery</td>
<td>1</td>
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<tr>
<td></td>
<td></td>
<td>16</td>
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<tr>
<td>Spring semester</td>
<td>PHTY 506 Functional Neuroanatomy</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>PHTY 537 Rehabilitation II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHTY 503 Applied Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHTY 508 Measurement and Assessment</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Summer semester two</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Second professional year

#### Fall semester
- PHTY 626 Life Span Development and Motor Control I
- PHTY 648 Orthopedic Physical Therapy
- PHTY 609 Clinical Biomechanics
- PHTY 621 Therapeutic Agents
- PHTY 624 Physical Therapy Seminar I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>PHTY 626 Life Span Development and Motor</td>
<td>6</td>
</tr>
<tr>
<td>Control I</td>
<td></td>
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<tr>
<td>PHTY 648 Orthopedic Physical Therapy</td>
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</tr>
<tr>
<td>PHTY 609 Clinical Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHTY 621 Therapeutic Agents</td>
<td>5</td>
</tr>
<tr>
<td>PHTY 624 Physical Therapy Seminar I</td>
<td>2</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
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#### Spring semester
- PHTY 627 Life Span Development and Motor Control II
- PHTY 640 Neurological Physical Therapy
- PHTY 644 Orthotics and Prosthetics
- PHTY 623 Cardiopulmonary Physical Therapy
- PHTY 646 Clinical Medicine
- PHTY 615 Pharmacology

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PHTY 627 Life Span Development and Motor</td>
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<tr>
<td>Control II</td>
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<tr>
<td>PHTY 640 Neurological Physical Therapy</td>
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<tr>
<td>PHTY 644 Orthotics and Prosthetics</td>
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<tr>
<td>PHTY 623 Cardiopulmonary Physical Therapy</td>
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<td>PHTY 646 Clinical Medicine</td>
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<td>PHTY 615 Pharmacology</td>
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<td><strong>Total</strong></td>
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#### Summer semester three
- PHTY 650 Clinical Education II

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
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### Third professional year

#### Fall semester (block 1 – 8 weeks)
- PHTY 661 Administration and Management
- PHTY 654 PT Seminar II
- PHTY 670 Clinical Integration
- PHTY 651 Professional Issues
- PHTY 691 Special Topics (electives)

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>PHTY 661 Administration and Management</td>
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<tr>
<td>PHTY 654 PT Seminar II</td>
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<td>PHTY 670 Clinical Integration</td>
<td>2</td>
</tr>
<tr>
<td>PHTY 651 Professional Issues</td>
<td>2</td>
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<td>PHTY 691 Special Topics (electives)</td>
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<td><strong>Total</strong></td>
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#### Fall semester (block 2 – 12 week clinical internship)
- PHTY 680 Clinical Education III

<table>
<thead>
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<tr>
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</tbody>
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#### Spring semester
- PHTY 680 Clinical Education IV (12 week clinical internship)
- PHTY 674 PT Seminar III

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<td>PHTY 680 Clinical Education IV (12 week</td>
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</tr>
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Note: The preceding curriculum plan is under continuous review by the faculty. Course content, sequencing and time commitments are subject to change.
School of Allied Health Professions

Department of Rehabilitation Counseling

Founded in 1955, the Department of Rehabilitation Counseling serves as a national leader in the professional preparation of certified rehabilitation counselors who will exercise skill and competence on a high ethical level and with personal integrity. Accessible, innovative, research-based educational experiences that encourage the use of a critical and exploratory attitude are emphasized. The department seeks to perpetuate active programs of research and service, and maintain high levels of teaching competence. In partnership with students, community agencies and consumer and professional organizations, the department endeavors to advance the personal, social and economic independence of individuals with disabilities.

The Department of Rehabilitation Counseling is fully accredited by the Council on Rehabilitation Education (CORE), and is the only such program in the commonwealth of Virginia. The purpose of accreditation is to promote the effective delivery of rehabilitation services to people with disabilities by fostering ongoing review and improvements of rehabilitation education programs. CORE has developed a field-based research accreditation process that has gained widespread acceptance in the professional accreditation movement. With over 2,000 alumni, the department also enjoys solid relationships with many community organizations that serve as excellent sites for clinical training.

Faculty adviser

Every student must have a faculty adviser to guide the student regarding course selection and scheduling, to supervise his/her research and to act as a channel of communication with the department, to other departments, and to the Graduate School. When the student receives notification of admission to the department, it is his/her responsibility to contact the faculty adviser to plan the program of study. Students consult with faculty advisers on a regular basis to ensure orderly progress through the entire program of study, choose clinical placement sites, select electives and plan their careers.
The advanced certificate program in professional counseling is designed for persons who hold the Master of Science or Master of Arts degree in counseling from VCU or other institutions. The intent is to assist students in meeting the educational requirements for the Licensed Professional Counselor, the Licensed Substance Abuse Practitioner and the Certified Substance Abuse Counselor credentials in Virginia and other states. The certificate program also may be pursued to fulfill preservice or continuing education requirements for various national certifications, such as National Certified Counselor or Certified Rehabilitation Counselor. Applicants to the program designate a preferred specialization based upon interest and need. Specialization requirements may exceed the minimum number of required credits for the certificate program as a whole.

Specific goals include but are not limited to:

1. The encouragement of advanced graduate education in counseling.
2. The facilitation of the professional counselor’s career development efforts and goals.
3. The facilitation of the acquisition or maintenance of professional state licenses or national certificates.
4. The expansion of the student’s awareness and expertise in specialized counselor roles and functions.

Admission requirements

The applicant must:

1. Have completed a master’s degree in counseling.
2. Submit an application to the VCU Graduate School, including a statement of goals and three letters of reference.
3. Complete a personal interview with a faculty member from the Department of Rehabilitation Counseling.

While not a requirement for admission, applicants who are seeking licensure or certification in the commonwealth of Virginia are strongly encouraged to have their graduate transcripts evaluated by the Virginia Board of Counseling for official verification of holding a degree in counseling. The board also will determine the number of hours completed toward satisfying the 60 graduate credit hours requirement.
To qualify for the advanced certificate in professional counseling, the following requirements must be satisfied:

1. With an academic adviser, design and complete an approved course of study that leads to the completion of the educational requirements for licensure or certification as a professional counselor.

2. Complete a minimum of 15 graduate hours of course work in professional counseling with an overall GPA of 3.0 or higher.

3. Complete six of 15 hours of graduate course work in advanced counseling skills courses.

4. The 15 credits must be nonduplicative of previous graduate work completed at VCU or other institutions.

5. Transfer credits are not accepted.

Concentration areas

Two concentration areas are available in the certificate program as follows:

- Professional counseling, which requires a minimum of six credits in advanced counseling skills course work in the RHAB 613-614 series consisting of skills development in cognitive/behavioral counseling, motivational enhancement therapy, Gestalt therapy and others.

- Substance abuse counseling, which requires the completion of RHAB 521 Foundations of Substance Abuse Rehabilitation, RHAB 522 Clinical Evaluation, Assessment, and Treatment Planning in Substance Abuse Rehabilitation and RHAB 523 Contemporary Issues in Substance Abuse Treatment and Recovery. For persons who have not completed a practicum experience, RHAB 695 Supervised Clinical Experience is required.

Advanced supervised clinical practice within the above concentrations also can be arranged for internship and practicum experience in the student’s area of specialization.

Additional information

The program and all RHAB courses are taught from a rehabilitation counseling perspective. While course work from other departments such as Psychology, Social Work and Counselor Education may be included in the course of study, emphasis is placed upon a rehabilitation philosophical approach.

It also is important that applicants understand that no guarantee can be provided by VCU that a particular licensing or certification body will accept the courses listed in fulfillment of certificate requirements. Credentialing bodies are numerous, their requirements are in flux and they are not always consistently applied to individual applicants. In advising students, the faculty advisers make good faith efforts to interpret educational requirements with students. However, the student is ultimately responsible for verifying the appropriateness of any course with the specific credentialing body involved.

To apply

Applicants for admission to the program must complete forms provided by the Graduate School indicating “Certificate in Professional Counseling” as the curriculum and designate a preferred
specialization or interest area. Detailed information on the curriculum is available from:

Virginia Commonwealth University  
Department of Rehabilitation Counseling  
McGuire Hall  
1112 E. Clay St.  
P.O. Box 980330  
Richmond, VA 23298-0330  
(804) 828-1132  
Fax: (804) 828-1321

Completed applications must be addressed to:

Virginia Commonwealth University  
Graduate School  
1001 Grove Ave.  
P.O. Box 843051  
Richmond, VA 23284-3051
Graduates from accredited rehabilitation counseling programs are typically trained in counseling theory and techniques; individual, group and environmental assessment; psychosocial and medical aspects of disability; human development; cultural diversity; principles of psychiatric rehabilitation, case management and rehabilitation planning; issues and ethics in rehabilitation service delivery; technological adaptation; vocational evaluation and work adjustment; career counseling; implementation of the Americans with Disabilities Act; job development; and placement.

The minimum degree requirement is 48 graduate credits including 33 credits of didactic course work, 100 hours of fieldwork, 600 hours of internship, six credits of electives, and a comprehensive examination.

The on-campus Master of Science in Rehabilitation Counseling degree has been available since 1955. The program consists of 48 graduate credits. Currently, 90 full- and part-time graduate students are enrolled on campus. In addition, the same degree has been made available on a distance-learning basis since July 1999. Ten required courses and the two electives have been available online according to a predetermined schedule. Two clinical counseling courses as well as the two electives also have been available on-site in a compressed schedule (typically one-to-two weeks) at various locations. Alternately, up to 12 hours may be taken at an accredited graduate counseling program and accepted as transfer credit with prior approval. Approved internships with appropriate faculty and agency supervision are negotiated by the department, student and the local community organization.

Full-time program of study (example only)

<table>
<thead>
<tr>
<th>Semester I</th>
<th>credits</th>
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</thead>
<tbody>
<tr>
<td>RHAB 525</td>
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<tr>
<td>RHAB 611</td>
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</table>

<table>
<thead>
<tr>
<th>Semester II</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>RHAB 612</td>
<td>3</td>
</tr>
<tr>
<td>RHAB 521</td>
<td>3</td>
</tr>
</tbody>
</table>
### Comprehensive examination

All students are required to complete the Certified Rehabilitation Counselor (CRC) Examination in conjunction with RHAB 695 or 696.

### Specializations

In collaboration with the faculty adviser, students may wish to design a program of study around a specific area of interest. Specializations in substance abuse, mental health, physical/sensory disabilities and gerontology are the most common in the department. Careful planning will typically allow students to meet the educational requirements for several additional credentials beyond the Certified Rehabilitation Counselor (CRC); e.g., National Certified Counselor, Certified Mental Health Counselor, Certified Case Manager, Certified Vocational Evaluator, Certified Disability Management Specialist, Rehabilitation Provider (Virginia), or Master Addictions Counselor. Specialization is achieved through:

- customization of assignments in required courses such as RHAB 640, RHAB 633, RHAB 691 or RHAB 654. These courses often involve assignments that require the student to specify a population of interest that the student is free to select.,
- required courses specific to your population of interest (e.g., RHAB 521),
- careful selection of elective course work (e.g., RHAB 522, RHAB 523, RHAB 533),
- careful selection of a 600-hour internship site and supervisor (RHAB 695-696), and
- additional elective course work beyond the required 48 credits.

### Foundations of clinical training

According to CORE Standards and the requirements of the department, students must have
supervised rehabilitation counseling fieldwork and internship experiences that include:

- a minimum of 100 clock hours of fieldwork experience (as part of RHAB 691),
- a minimum of 600 clock hours of internship experience in rehabilitation settings (as part of RHAB 695-696),
- written expectations and procedures for these experiences that are distributed to students and agency supervisors,
- the following activities: orientation to program components, policies and procedures; introduction to staff and their roles and functions; identification of the expectations for students; observation of all aspects of the delivery of rehabilitation counseling services; work assignments performing the tasks required of an employed rehabilitation counselor in a rehabilitation setting from intake to discharge and/or placement; reporting, including all required academic reports as well as logs, weekly progress reviews and summaries of activities, and
- evaluation of student performance by the agency supervisor and the faculty supervisor, and including self-evaluation by the student.

Internship experiences shall be carried out under the regularly scheduled supervision of a CRC. The quality of supervision shall be maintained by involvement of VCU faculty in terms of in-service training, consultation, information and the provision of professional development resources to agency supervisors.

**Colloquia and grand rounds**

Periodically, special colloquia, grand rounds, workshops and institutes are offered for department students and agency personnel. Students will receive reasonable notice of these events, and some may be required for specific classes. Students should make every effort to attend because these experiences significantly enrich the curriculum.

**Time limit for completion of degree**

All degree requirements must be met within seven years from the date of initial enrollment.
Master of Science in Rehabilitation Counseling and Certificate in Aging Studies

The Department of Rehabilitation Counseling, in cooperation with the Department of Gerontology, provides its degree-seeking students with the opportunity to earn the Certificate in Aging Studies while concurrently completing the requirements for the Master of Science in Rehabilitation Counseling. Students must meet admission requirements for both the rehabilitation degree and the gerontology certificate program, and admission into one is independent of the other. A total of 50 carefully prescribed graduate credits are necessary to complete requirements for both credentials. Most important, RHAB 696 Supervised Clinical Practice must be completed in a rehabilitation setting related to aging. Additional information, including the specific program of study for the counseling program, may be obtained in the Department of Rehabilitation Counseling. Information on the curriculum presented by the Department of Gerontology can be obtained by contacting the chair of the Department of Gerontology.

Admission deadlines and requirements

Both full- and part-time students are valued and are welcome to apply. Applications are reviewed on an ongoing basis. To be considered, all pertinent materials must be received in the department by Aug. 1 (for fall), Dec. 1 (for spring) or May 1 (for summer). Admission requirements include:

- an undergraduate GPA of 2.7 on a 4.0 scale; or 2.7 in the last 60 semester hour credits (Based upon transcripts provided to the Graduate School),
- three positive letters of reference from professors or employers (on reference forms provided by the Graduate School),
- satisfactory performance on either the GRE (804) 828-6916 or the MAT (804) 828-1193,
- a relevant and clear statement of goals for graduate study and career,
- statement of previous work or volunteer experience, and
- a personal interview with a faculty member may be required.

A complete set of application materials is available from the department office at (804) 828-1132.

Transfer credit

A maximum of 13 hours of graduate credit may be transferred from another VCU graduate program or outside institution if not applied previously to another degree. Transfer credits must carry a grade of “B” or higher from an accredited institution. Acceptance of transfer credit is
made at the level of the department chair and dean of the School of Allied Health Professions. Transfer credits earned as a nondegree-seeking graduate student are limited to six semester hours of credit. Credits earned as deficiency hours or to demonstrate the ability to compete at the graduate level, though transferable, may not be applied to the 48-credit program of study.
School of the Arts

The School of the Arts is accredited by the National Association of Schools of Art and Design, the National Association of Schools of Music and the National Association of Schools of Theatre.

The graduate program in the School of the Arts offers advanced degrees in the following areas of study:

**Doctor of Philosophy**
art history

**Master of Arts**
architectural history
historical studies
museum studies

**Master of Art Education**
art education

**Master of Fine Arts in Design**
film
interior environments
photography
visual communications

**Master of Fine Arts in Fine Arts**
ceramics
fibers
furniture design
glassworking
jewelry/metalworking
painting
printmaking
sculpture

**Master of Fine Arts in Theatre**
costume design
scene design
theatre pedagogy
acting
directing
Graduate student status

The School of the Arts recognizes two categories of graduate students. The first is comprised of those who are accepted either provisionally or as students with full standing into the graduate degree programs of the various departmental areas. These students may matriculate full time or part time except for the residence limitation discussed elsewhere in this bulletin.

The second category is that of the nondegree-seeking graduate student, or “special” graduate student. There are two types of “special” graduate students. The first is the student whose expectation of eventual acceptance into a graduate program is high and who wants to begin graduate work while application materials are being completed and processed.

Holders of the baccalaureate degree from recognized institutions may enroll in graduate courses as nondegree-seeking special graduate students, but such courses are not applicable toward a graduate degree from this institution unless the student is accepted into a graduate degree program prior to the conclusion of the semester in which the student registered as a nondegree-seeking graduate student.

A nondegree-seeking student who is later admitted as a degree-seeking student will not be allowed to apply toward a degree more than six credits earned as a nondegree-seeking student.

The second type of nondegree-seeking graduate student is the student who holds a baccalaureate degree, who wishes to take graduate courses for personal enrichment, and who does not intend to work toward a graduate degree. There is no limit to the number of credits that students in this category may take, as long as the academic performance is credible.

All nondegree-seeking ("special") graduate students must have written permission from the chair of the appropriate department in order to enroll in classes.

Admission procedures

Application forms and instructions for applying to all graduate programs in the School of the Arts are available on the School of the Arts Web site at http://www.vcu.edu/artweb.

General information about admission to graduate study and application procedures can be found in the Graduate Studies at VCU section of this bulletin or on the Graduate School Web site.
Admission requirements

For Ph.D. degree, see Ph.D. in Art History section.

For all other degrees (M.A., M.A.E., M.F.A. and M.M.):

- applicants should hold the baccalaureate degree from an accredited institution
- it is expected that applicants will have a 3.0 ("B") average on the last 60 semester hours of undergraduate work

The prospective student should consult the appropriate section of this bulletin for additional admission requirements for a particular degree program. Such requirements include:

- the Graduate Record Examination (GRE) for applicants to art history
- an audition and examination for applicants for music, as described in the program description for the M.M. degree
- an audition or presentation of portfolio, as well as a personal interview, for applicants for the M.F.A. in theatre
- a portfolio review for all applicants to the visual arts M.F.A. degrees (a personal interview is encouraged)

Advising

All students accepted into advanced degree programs must make an appointment with the chair of the department or the graduate adviser prior to registration for their first semester of course work. Normally, the student’s initial adviser will be the chair of the department; but students may be assigned an adviser more directly related to their areas of concentration.

Students also are encouraged to consult faculty members outside their major area and arrange with the appropriate departmental chair to use facilities and equipment available in other departments.

Registration

Graduate art students are urged to plan their schedules and register during advance registration. Registration materials for students accepted into advanced degree programs are available in the department during the advance registration and registration periods. The advantage of advance registration is that of securing places in classes before they are closed and of obtaining proper counsel from advisers. All graduate students must see their assigned advisers for schedule planning and signature approval. New nondegree-seeking graduate students, or those contemplating registration as such, must secure written permission to register from the departmental chair.

Continuous enrollment policy for graduate students

Graduate students in the School of the Arts must observe the University Continuous Enrollment Policy as explained in the Graduate Studies at VCU chapter of this bulletin.
Candidates for all advanced degree programs, after completing all formal course work, must register for at least one semester hour of credit each semester, except summer, until the culminating graduate project (dissertation, thesis, creative project, exhibition, recital, etc.) is completed and the student is ready to graduate. Also, if candidates intend to graduate in August, they must be enrolled for at least one semester hour in the summer session.

Special charges

All degree-seeking graduate students are charged an art comprehensive fee. The art comprehensive fee is not charged to students who are registered only in course work to complete a dissertation/thesis/creative project or who are enrolled in order to satisfy the one-credit requirement for continuous enrollment. Nondegree-seeking graduate students enrolled in any of the courses that require an additional outlay for materials will be billed for those individual fees by the Student Accounting Department.

In addition to the comprehensive fee for all majors in the School of the Arts, all students registering for private music lessons pay an applied music fee.

Financial support

The School of the Arts awards a limited number of graduate assistantships and scholarships to full-time students. Applicants seeking financial support must submit completed applications for scholarships and/or graduate teaching assistantships directly to the chair of the student’s department by Feb. 15 for fall admission and Oct. 15 for spring admission. Application forms are available through the School of the Arts, Office of Graduate Studies, Virginia Commonwealth University, Pollak Building, Room 201, Richmond, VA 23284-2519.

Transfer credit

A maximum of nine graduate credits may be transferred from other accredited institutions and applied to any of the graduate degree programs in the School of the Arts upon approval of the department chair.

Advanced degree candidacy

Students seeking an advanced degree in all programs must apply for advanced degree candidacy. Those seeking the M.A.E. and the M.M. must submit the application during or after the completion of the first nine semester credits of graduate work and prior to the completion of 18 semester credits. Students pursuing the M.F.A. degree must submit the application during or after the completion of the first 15 semester credits of graduate work and prior to the completion of 30 semester credits. Applications for candidacy are available in the departmental offices and the Office of Graduate Studies, School of the Arts.

Admission to a degree program does not constitute candidacy, and admission to degree candidacy is not an automatic process. Departments carefully review applicants for candidacy on such basis as examination or review of creative work or performance. Upon certification by the
department that the applicant has met all departmental expectations, including the minimum 3.0 GPA and is adequately prepared to continue pursuing the degree program, the School of the Arts will admit the applicant to degree candidacy.

Students who are found to be inadequately prepared to continue their graduate programs, but who demonstrate the potential to ultimately fulfill degree requirements will be advised as to what additional work will be needed in order to meet departmental expectations. Candidacy, in such instances, will be postponed until departmental expectations are satisfied; postponement of candidacy may result in termination of financial assistance. Students whose academic or creative work demonstrate no likelihood of successful completion of a graduate program will be denied candidacy by the School of the Arts.

School of the Arts residency requirements

Candidates for the master of fine arts degree in the fine arts and theatre must complete a minimum of one-third of their degree program semester-hour credits within one calendar year.

Candidates for all master’s degrees in the School of the Arts have five years plus two possible extensions of one year each to complete all degree requirements. The above limitations apply to both full-time and part-time students. A petition for an extension is initiated with the academic or thesis adviser.

Advanced degree requirements

● Students must achieve candidacy (with the exception of art history students).

● Students must complete all formal course work.

● Students must maintain at least a 3.0 cumulative GPA. No grade below “B” will count toward graduation for students in the art history and the visual communications degree programs. For all students in the theatre program, any grade below “B” in any course will result in termination from the degree program. Students in all programs in the Department of Music must not have more than six hours or 20 percent of semester hours attempted — whichever is greater — with a grade of “C.” For all other degree programs in the School of the Arts, no grade below “B” is acceptable for any course within the student’s major department, and a grade below “B” in a course in the student’s major department will result in termination from the degree program.

● All students must complete the culminating project (dissertation, thesis, final examination, creative project, recital, etc.) as outlined in departmental guidelines. The thesis, or other written documentation related to the culminating project, must be done in a form that can be retained by the university and in accordance with departmental guidelines. Students preparing a thesis must use the guidelines set forth in the Preparation of Thesis, available in departmental offices or the Office of Graduate Studies, School of the Arts.

School of the Arts Library

The School of the Arts Library, located in the Pollak Building, has a collection of more than 450,000 slides and a working collection of current art publications and magazines.

VCU is a short distance from Washington, D.C., Baltimore, Philadelphia and New York City and
the museums, libraries and research facilities in those urban areas.
Department of Art Education

The Master of Art Education program attempts to expand and further refine each M.A.E. student's ability, knowledge and attitudes in order to provide the profession with more effective art teachers, coordinators, supervisors and other educational specialists in the arts.
School of the Arts

Master of Art Education

The Master of Art Education program is structured on an individualized basis rather than on a prescribed program of graduate studies. To benefit from the program's flexibility, the M.A.E. student is assisted by a faculty adviser in determining his or her own educational needs and professional goals. With the assistance of the adviser, the M.A.E. student determines a viable structure for the content and sequence of a program of graduate studies.

Such a program can utilize the collective expertise of the art education faculty as well as appropriate community resources. Graduate course work, therefore, could include both on-campus and off-campus involvement.

Opportunities for personal growth through the M.A.E. Program also include the rich resources of other graduate departments in the university in the visual and performing arts, education (including supervision, administration and special areas), the natural and social sciences, and the humanities. Alternative approaches to traditional thesis methods also are encouraged within the program.

Admission requirements

Undergraduate preparation

In addition to the School of the Arts admission requirements, applicants in art education must have completed a minimum of 36 semester-hour credits in studio art at the undergraduate level. It is desirable for applicants to have had at least two years of teaching experience prior to beginning graduate studies.

Portfolio

Applicants must submit evidence of creative or professional involvement in the format of their choice. Included should be material such as slides of representative work, description of professional activities, articles published, curriculum and program material developed, and other documentation of activities with artists, teachers and children.

Degree requirements

Program pattern

| Art education electives | 12 |
| Approved electives     | 15 |
| Issues and methods of inquiry | 3 |
Thesis or project option

A thesis or project option may develop from graduate course work or professional involvement. Projects are those endeavors of thesis proportion that do not fit the traditional thesis format. A thesis or project may be explored by descriptive research, historical research, empirical/statistical research, design of learning packages, philosophical study, curriculum development or action research.

Nonthesis option

In lieu of the thesis, students may elect to complete six credit hours of graduate course work in the Department of Art Education. The selection of these six credits is subject to the approval of the student's adviser. In addition, the student must successfully pass a written and oral examination at the conclusion of all course work. The examination will pertain to the course work, to contemporary issues in the field and to the student's particular area of expertise.
Department of Art History

The department offers a broad-based education in the humanistic discipline of art history at the 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 students.
## Master of Arts in Art History

The Master of Arts program offers three different tracks.

### M.A. – historical studies

Graduate studies leading to the M.A. degree in art history are intended to train students to become creative and accomplished teachers and scholars in the discipline of art history. The program is designed to provide a comprehensive knowledge of the major areas and historical periods of art as well as the various research and methodological skills requisite to the field.

The requirements listed below are in conjunction with School of the Arts graduate admission and degree requirements.

### Admission requirements

In addition to the School of the Arts requirements, applicants should have completed a minimum of 21 undergraduate semester credits in art history with additional work in relevant humanities and social science courses, such as English, philosophy, foreign language and history. Applicants should include with their application an undergraduate research paper in art history to serve as a writing sample. Students whose undergraduate training is less extensive may be admitted provisionally and subsequently attain full graduate status.

### Degree requirements

A total of 30 credits in course work and thesis

<table>
<thead>
<tr>
<th>Art history (period courses)</th>
<th>21 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historiography and methodology</td>
<td>3 credits</td>
</tr>
<tr>
<td>Thesis</td>
<td>6 credits</td>
</tr>
</tbody>
</table>

At least six of the 21 art history credits must be taken in seminar classes. Students must earn a minimum grade of "B" in ARTH 590 Historiography in order to enroll in subsequent graduate-level art history courses.

Students must demonstrate a reading knowledge of German or any appropriate Romance language by passing a departmental exam. All students must take the relevant departmental language exam during the first academic semester. Requests to repeat the exam more than once in a given language require departmental approval.
Students also must demonstrate general programmatic competence in art history by passing a comprehensive examination, taken sometime toward the end of the course work.

The master’s program culminates with a thesis, written under the direction of a departmental adviser and a thesis committee.

For more complete information and details on these procedures, contact the Department of Art History.

**M.A. – architectural history**

The Department of Art History offers a master of arts degree with a track in architectural history. While concentrating in architectural history, students are required to take courses in art history as well as museum studies and/or urban studies and planning. Such a program is designed for students who wish to pursue careers as academicians or practitioners in the field, as well as for those who wish to pursue a doctoral degree. The courses taken in museum studies, or in conjunction with the Department of Urban Studies and Planning, provide a unique interdisciplinary approach to the study of architectural history.

**Admission requirements**

In addition to the School of the Arts requirements, applicants should have completed a minimum of 21 undergraduate semester credits in art and/or architectural history, of which six credits must be in the survey of architectural history. Some basic drafting experience also is recommended. Additional work in relevant humanities and social sciences, such as literature, philosophy, foreign language and history is necessary. Applicants should include with their application an undergraduate research paper in art history to serve as a writing sample. Students whose undergraduate training is less extensive may be admitted provisionally and subsequently attain full graduate status.

**Degree requirements**

A total of 39 credits in course work and thesis

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural history</td>
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<tr>
<td>Art history (period courses)</td>
<td>9</td>
</tr>
<tr>
<td>Historiography and methodology</td>
<td>3</td>
</tr>
<tr>
<td>Urban studies and urban planning and/or museum studies</td>
<td>9</td>
</tr>
<tr>
<td>Thesis</td>
<td>6</td>
</tr>
</tbody>
</table>

At least three of the 12 architectural credits must be taken in seminar classes. Students must earn a minimum grade of “B” in ARTH 590 Historiography in order to enroll in subsequent graduate-level art history courses.
Students must demonstrate a reading knowledge of German or any appropriate Romance language by passing a departmental exam. All students must take the relevant departmental language exam during the first academic semester. Requests to repeat the exam more than once in a given language require departmental approval.

Students also must demonstrate general programmatic competence in art history by passing a comprehensive examination taken sometime toward the end of the course work.

The master’s program culminates with a thesis, written under the direction of a departmental adviser and a thesis committee.

For more complete information and details on these procedures, contact the Department of Art History.

**M.A. – museum studies**

The program in museum studies stresses those attitudes and skills necessary to accomplish the major goals of any professional museum operation: to collect, preserve, exhibit and interpret the art and artifacts of the past and present within an extended curriculum and professional museum environment. The course of study also includes an internship for academic credit under the direct supervision and professional guidance of individuals in the field.

The curriculum provides a broad educational background in art history and, in the field, will include studies in connoisseurship, registration methods, exhibition design and educational programs for museums. It also provides a more particularized experience in areas in which the student desires to develop expertise. These areas include museum theory and administration, historic house museum, curatorship, and contemporary alternative space gallery.

**Admission requirements**

In addition to the School of the Arts admission requirements, applicants should have completed a minimum of six credits in the survey of western art, nine credits of period studies and some undergraduate work in the humanities. Applicants should include with their application an undergraduate research paper in art history to serve as a writing sample. Any applicant whose training is less extensive may be provisionally admitted and subsequently may gain full graduate status upon completion of the deficiency.

**Degree requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Museum studies</td>
<td>12</td>
</tr>
<tr>
<td>Museum internship</td>
<td>3</td>
</tr>
<tr>
<td>Art history (period courses)</td>
<td>12</td>
</tr>
<tr>
<td>Art historiography and methodology</td>
<td>3</td>
</tr>
<tr>
<td>Museum project or thesis</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>
At least three of the 12 art history credits must be taken in a seminar class. Students must earn a minimum grade of "B" in ARTH 590 Historiography in order to enroll in subsequent graduate-level art history courses.

Students must demonstrate a reading knowledge of German or any appropriate Romance language by passing a departmental exam. All students must take the relevant departmental language exam during the first academic semester. Requests to repeat the exam more than once in a given language require departmental approval.

Students also must demonstrate general programmatic competence in museum studies and art history by passing a comprehensive examination taken toward the end of the course work.

An internship at one of the cooperating local or regional museums is a degree requirement of particular importance, enabling students to apply their knowledge and to develop a personal awareness of effective museum exhibition procedures. As a culmination to the course of study, students may opt to plan and mount a major exhibition on campus or at a museum in lieu of a written thesis with the approval of the department.
Ph.D. in Art History

The Ph.D. in Art History is a research-oriented degree designed to train critical and productive scholars who are well-grounded in the literature, methodology and major art historical problems in a designated area of study. The program’s focus is on interdisciplinary and multicultural studies utilizing new critical methodologies.

Doctoral students will undertake an established program of course work and will be engaged in directed research and scholarly exposition within specialized areas of art historical inquiry.

Degree requirements

Course work beyond the master’s degree in art history:

- Major area: 9 credits
- Minor area: 6 credits
- Art history electives: 9 credits
- Dissertation: 6 credits
- Total: 30 credits

The requirements of the Graduate School for candidacy exams and dissertation committees apply to participants in this program. Part-time study for portions of the program is possible.

Admission to the Ph.D. program

To enter the doctoral program, the applicant must have the approval of the Graduate Committee, the chair of the Department of Art History and ultimately final approval from the director of graduate studies in the School of the Arts and the dean of the Graduate School. In addition to all required VCU graduate application materials, prospective Ph.D. students should submit either a completed master’s thesis or two writing samples. In addition to scores from the GRE, art history Ph.D. applicants also must submit scores for the GRE Writing Assessment exam, administered separately through GRE testing. In certain cases, a personal interview with the graduate committee or a faculty member may also be requested. Students who have completed all of the requirements (including the language requirements) for the master of arts degree in the Department of Art History at VCU except the master’s thesis may request admission to the doctoral program by submitting a formal written request accompanied by two research papers to the departmental Graduate Committee. The Graduate Committee may waive the requirements of the master’s degree and the writing of the master’s thesis, and grant the student entrance into the doctoral program. (Such a waiver does not constitute a master’s degree). Students who have completed a Master of Arts in Art History degree at VCU or any other accredited institution will...
be eligible to apply directly to the doctoral program.

Upon completion of the first nine credits of course work (first semester), the student will choose a program adviser, who, together with the departmental chair of the Graduate Committee, will advise the student in establishing a program of study.

For application materials, write to: Director of Graduate Studies, Department of Art History, 922 W. Franklin St., Richmond, VA 23284-3046.

**Requirements for the Ph.D. degree**

Doctoral students must demonstrate competency in two foreign languages before admission to candidacy. Foreign language competency demonstrated for an M.A. may be applied to this degree with departmental approval. Although French and German are typically the two languages of proficiency, a student may be required to demonstrate competency in other languages for study in particular areas. Students must take one departmental language exam in their first academic semester and, if necessary, the second in the second academic semester. Requests to repeat the exam more than once in a given language require departmental approval.

Ph.D. students must satisfy each of the following criteria for successful completion of the program: a) 24 credits of prescribed graduate course work beyond the master’s degree; this must include a minimum of six credits in Western and six credits in non-Western areas, and a minimum of 12 credits in seminar courses; b) all language proficiency requirements; c) the comprehensive slide and field examinations; d) approved dissertation proposal with candidacy granted; and e) completed dissertation and successful defense. All degree requirements must be completed within seven years of the first semester of enrollment in the doctoral program.

**Majors and concentration**

Ph.D. students must select major and minor areas under the direction of two different full-time department faculty members. The same faculty members may not supervise both areas for a single student. Students will select an area of minor concentration, which may be from any area of art historical inquiry outside the major or, upon approval of the Graduate Committee, may be outside the department. Students will be particularly encouraged to undertake cross-cultural investigations.

Nine credits will be taken in the major area and six in the minor; nine additional elective credits may be taken from any art history area. With approval of the Graduate Committee, students may substitute three elective credits with a course outside of the department.

**Comprehensive exam/admission to candidacy**

All master’s and doctoral students enrolled in the graduate program in art history must pass the departmental comprehensive slide examination given each semester. Doctoral students will be required to pass a field comprehensive examination, which may consist of written and oral components. After satisfactory completion of the comprehensive examination and demonstration of proficiency in two languages, the student will work with an adviser to establish a committee.
and will submit to said committee a dissertation proposal. Upon approval of the dissertation proposal, candidacy for the doctoral degree will be granted. Only after candidacy is granted may a student enroll for dissertation credits. (A student who does not pass the comprehensive examination may take that exam a second time. This second examination must be taken within six months of the first attempt.)

**Dissertation**

After admission to candidacy, participants proceed to complete and defend their dissertation. This is done under the supervision of the dissertation director working in concert with the dissertation committee. Participants are required to maintain continuous enrollment of at least three credit hours per semester (excluding summer) until they have attained six hours of dissertation credit, after which they may enroll for as few as one credit per semester. The number of credit hours per semester is expected to reflect the intensity of use of university resources, especially faculty time. The dissertation must represent independent research that is devoted to an original question or hypothesis with the appropriate development, analysis and interpretation. Successful defense of the dissertation completes the requirements for the degree.

**General information**

**Financial assistance**

Although financial assistance is limited, funds are available. No prospective student should refrain from seeking admission to the school for financial reasons alone. However, since funds available through the School of the Arts are limited, applicants are strongly urged to seek additional sources to finance their education.

**Research and teaching assistantships**

Research and teaching assistantships may be available to doctoral students. Additional information is available from the director of graduate studies, Department of Art History.
Master of Fine Arts in Design

The purpose of this advanced degree program in design is to prepare the individual designer to assume a leadership role in a complex and expanding profession. The course work, applied experience and research that constitute the program will enable the designer to better solve visual and spatial problems and to function more effectively as an administrator, planner and educator.

The program offers the graduate student the opportunity to use appropriate courses and resources from schools within the university, to participate in internships and research with various agencies and organizations concerned with programs of design, and to view design as an interdisciplinary profession with an essential contribution to make toward the solution of the problems of today.

Characteristics of the program

The Master of Fine Arts in Design is an advanced interdisciplinary program in the study of design that utilizes knowledge and human potential in alternative ways to define problems and create change.

Graduate students not only have the opportunity to work within a design field, such as visual communications, interior environments and photography/film, but also have the opportunity to develop competencies across fields and to engage in research and inquiry of a social or environmental nature to create new visual forms and communicative content in a rapidly changing society.

Internship and field experiences

Within a professional school of the arts in an urban university there are excellent opportunities for appropriate graduate field experiences. They include:

- formal arrangements with state agencies, industries, foundations and community organizations that would enable the graduate designer to function as a member of a project team or task force,
- service to various organizations, offered as the need arises, possibly with the student working on a specific problem or project, and
- research internships developed with the university on school-supported or outside-funded projects, especially those that concern social problems, health care and institutional...
Program requirements

Thesis

The thesis or creative project is a requirement for the M.F.A., design (visual communications) degree, a thesis and exhibition are requirements for the M.F.A., design (photography and film) degree and a research-design project and exhibition are required for the M.F.A., design (interior environments) degree. The culminating work is done in a form which can be retained by the university.

Examples of thesis

**Interior environments:** An investigation in a scholarly area or specific research and documentation of a technical or creative project.

**Visual communications:** An exhibition of a visual communications problem appropriately documented or a specific research problem that explores the communicative, formal, and/or technological aspects of visual problem solving.

**Photography and film:** An exhibition of a cohesive body of photographs and/or film with the appropriate written documentation.

School of the Arts and university courses

The following courses common to all graduate programs in the School of the Arts are available to M.F.A. in Design students who desire to engage in research supervised by qualified professors within the school and other academic divisions within the university.

ARTS 592, 692 Individual Projects/Fieldwork
ARTS 704, 705 Research in the Arts

A variety of graduate courses offered within the School of the Arts can be utilized as electives by the student in this degree program. Some examples are:

ARTH 539 Advanced Studies in 20th Century Art and Architecture
ARTH 574 Advanced Studies in Film
PAPR 605 Graduate Painting
PAPR 615 Graduate Printmaking
PAPR 621 Graduate Drawing
SCPT 500, 600 Graduate Sculpture
THEA 603, 604 Problems in the History of Dramatic Literature

VCU offers a wealth of graduate courses that can, as electives, support the educational process and personal development of graduate students.
School of the Arts

Master of Fine Arts in Fine Arts

Students may be admitted to one of the following School of the Arts master of fine arts degree tracks: ceramics, fibers, furniture design, glassworking, jewelry/metalworking, painting, printmaking or sculpture. Students completing the M.F.A. in Fine Arts will be prepared for professional artistic practice directed toward the creation of works of art, the application and transmission of knowledge about works of art and their interrelationships with each other and with other aspects of culture. The graduate program advances the development of:

- individual studio and scholarly talents, interests and philosophies, used creatively to both expand and preserve our cultural heritage,
- professional studio competence as exemplified by a significant body of work,
- individuals with the potential to solve contemporary problems in all aspects of the visual arts and to explore and address new questions and issues,
- professional competence in the dissemination of knowledge, including logical, clear verbal and written presentation of aesthetic ideas in teaching and other contexts, and
- scholarly competence in the organization, evaluation and interpretation of knowledge.

Admission requirements

Undergraduate preparation

In addition to the School of the Arts admission requirements, applicants in the visual arts must have completed a minimum of 36 semester hour credits in art at the undergraduate level.

Portfolio

Refer to the specific specialization for the portfolio requirements.

Characteristics of the program

In M.F.A. studio art programs, assessment of progress is conducted on a regular and periodic basis through scheduled critiques and final course critiques and evaluations. Students have frequent opportunities to exhibit their work in the context of their educational programs. They
are encouraged to develop and present their work in circumstances that develop connections with the professional world related to their course of study. Students are admitted to degree candidacy after receiving approval by a faculty review committee.

**Program requirements**

Each specialization within the M.F.A. in Fine Arts program requires specific course work. Refer to the specific specialization for the program pattern. The M.F.A. candidate is required to present a final body of work demonstrating professional competence. This usually takes the form of an exhibition, written statement and oral review by a graduate faculty committee. The documentation of the culminating work is done in a form that can be retained by the university.

**Specializations**

- ceramics, fibers, furniture design, glassworking or jewelry/metalworking
- painting or printmaking
- sculpture
School of the Arts

Department of Communication Arts and Design

The objective of this department is to develop the philosophy and personal direction of students through focusing their resources for functional and theoretical visual communications. The department offers study opportunities in graphic design, typography, computer graphics, time arts, interactive design, design theory and design education.

Students working in the Graduate Center for Visual Communications concentrate on the philosophical, communicative and aesthetic relationships of visual problem solving and the interactive skills leading to the effective articulation of concepts. Although problems in visual communications anticipate refinement of students’ technical abilities, education in this program does not emphasize technical instruction.
School of the Arts

Master of Fine Arts in Design – Visual Communications

Specific admission requirements

The priority deadline for fall admission is Feb. 15. The program will continue to review applications on a space-available basis until June 30.

Undergraduate preparation

The 36 semester credits in studio art should include a minimum of 20 semester credits in visual communications and/or related fields. Under special circumstances, these requirements may be waived.

Portfolio

A minimum of 20 and a maximum of 40 slides that demonstrate visual organization, creative problem-solving ability and potential for research and growth are required. Under special circumstances, these requirements may be waived; applicants are accepted into a provisional course of study.

Interview

The department strongly recommends that applicants arrange an interview with the associate chair to meet with graduate faculty and current students and to tour facilities. Applicants may contact the department to schedule an interview.

Typical program pattern

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First semester</strong></td>
<td></td>
</tr>
<tr>
<td>Visual communications seminar</td>
<td>3</td>
</tr>
<tr>
<td>Visual communications workshop</td>
<td>9</td>
</tr>
<tr>
<td>Graduate elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Second semester</strong></td>
<td>15</td>
</tr>
<tr>
<td>Visual communications seminar</td>
<td>3</td>
</tr>
<tr>
<td>Visual communications workshop</td>
<td>9</td>
</tr>
<tr>
<td>Graduate elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Third semester</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Visual communications seminar</td>
<td>3</td>
</tr>
<tr>
<td>Visual communications workshop</td>
<td>9</td>
</tr>
<tr>
<td>Graduate elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Fourth semester</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Visual communications seminar</td>
<td>3</td>
</tr>
<tr>
<td>Directed research in visual communications</td>
<td>6</td>
</tr>
<tr>
<td>Thesis or creative project</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>
Department of Crafts

The Department of Crafts 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. Graduate 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 Department of Sculpture and the Department of Painting and Printmaking. Interaction among departments is encouraged.

The Department of Crafts 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.
Master of Fine Arts in Fine Arts – Ceramics, Fibers, Furniture Design, Glassworking and Jewelry/metalworking

The M.F.A. program requires 60 credits, which students usually complete in two years of full-time study. The majority of credits are taken in the student’s area of specialization. Graduate seminars, art history courses and other studio/academic electives round out the graduate student’s individualized program. Studio visits and critiques with visiting artists are an important aspect of the program.

Within the studio concentration, emphasis is placed on self-motivation, individual investigation, and the development of professional attitudes and skills. Graduate students are expected to demonstrate a serious commitment to their work and to develop mature ideas and forms of expression. Admission to the graduate program is highly selective and competitive.

Graduate students interact formally and informally with the faculty in their areas and with other faculty in the School of the Arts. Each graduate student works closely with a faculty committee that meets twice a semester for critiques and discussions. At the end of the first year, students present their work to their committee and departmental faculty in a candidacy review. At the successful completion of the 60 credits, a thesis exhibition is mounted at the university’s Anderson Gallery or at an alternative venue.

Admission requirements

In addition to the requirements specified in the M.F.A. in Fine Arts section of this bulletin, students are required to submit a portfolio. The portfolio should consist of 20 slides of recent work in the discipline media area of application (i.e., ceramics, fibers, wood/furniture design, glassworking, jewelry/metalworking).

Specialization requirements

M.F.A. in Fine Arts – ceramics, fibers, furniture design, glassworking or jewelry/metalworking

<table>
<thead>
<tr>
<th>Program pattern</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio</td>
<td>42</td>
</tr>
<tr>
<td>Electives, including art history</td>
<td>9</td>
</tr>
<tr>
<td>Graduate seminar</td>
<td>9</td>
</tr>
</tbody>
</table>

60
Department of Interior Design

The Department of Interior Design offers a Master of Fine Arts in Design with a specialization in interior environments. The program seeks 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 has a very comprehensive Web site with extensive information about the program, interior design in general, faculty, student work and the department newsletter. Visit the department's Web site at http://www.vcu.edu/artweb/interiors.
The M.F.A. degree program in Interior Environments, one of about ten available nationally, is a post-professional degree program that allows students the opportunity to develop an individualized direction in scholarship. Initiated in 1979, the program’s goal is to produce designers who understand the relationship between research and design and to encourage creativity, innovation and design excellence. The program offers flexibility in curriculum planning and scheduling. Courses address advanced design development, design theory and process, research methods in design, special topics in interior design, advanced design studies, and the development of a comprehensive thesis project of complex scale and scope. An interior design internship is available. Electives may focus on such topics as design education, historical studies, furniture design and computer technology.

Students may enter the interior design program in the fall or the spring semesters. Admission to the graduate degree program follows successful completion on an undergraduate degree program in interior design or in a related design degree program (such as architecture). All students are required to have a cumulative 3.0 GPA before entering the program. A thesis proposal is required by all applicants.

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.

**Specific admission requirements**

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 http://www.vcu.edu/artweb/interiors.

The department relates with the professional interior design community through a variety of activities. We invite 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 program places a strong emphasis on design studio courses. Because of this, students must enroll in only one design studio course (IDES 601, 602, 603 or 699) each semester. It is recommended that they enroll in IDES 621 Research Methods and Design during the first
semester in the program to facilitate the sequencing of graduate thesis work.

Students are required to have computer graphics and word processing proficiency. A laptop computer is required in the undergraduate interior design program. Information about the current computer package is available on the department Web site.

**Portfolio**

A minimum of 10 recent design projects that exemplify awareness, understanding and competency in creative design, graphic skills and technical ability are required. Other pertinent data should be included as necessary.

**Degree requirements**

A minimum of 60 credits is required within prescribed courses. A research-design project is required to complete the program of study. This project is undertaken and developed in the context of IDES 699 and must consist of the testing of an original idea that is supported by research. This information will be synthesized through the design development process and culminate in an individual creative project of complex scale and scope. Documentation must follow established guidelines and be presented in a form that can be retained by the department and the university. On completion of the thesis, students participate in an oral examination and a graduate exhibition.

**Typical program pattern**

<table>
<thead>
<tr>
<th>First semester</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate design studio</td>
<td>6</td>
</tr>
<tr>
<td>Research methods</td>
<td>3</td>
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<tr>
<td>Seminar elective: Interdisciplinary</td>
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</tr>
<tr>
<td>Studio elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second semester</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate design studio</td>
<td>6</td>
</tr>
<tr>
<td>Research-design thesis investigation</td>
<td>3</td>
</tr>
<tr>
<td>Topics in interior design</td>
<td>3</td>
</tr>
<tr>
<td>Studio elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third semester</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate design studio</td>
<td>6</td>
</tr>
<tr>
<td>Fieldwork/internship</td>
<td>6</td>
</tr>
<tr>
<td>Research-design project thesis</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth semester</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Design studies</td>
<td>3</td>
</tr>
<tr>
<td>Research-design project thesis</td>
<td>9</td>
</tr>
<tr>
<td>Seminar elective: Interdisciplinary</td>
<td>3</td>
</tr>
</tbody>
</table>
School of the Arts

Master of Fine Arts in Fine Arts – Ceramics, Fibers, Furniture Design, Glassworking and Jewelry/metalworking

The M.F.A. program requires 60 credits, which students usually complete in two years of full-time study. The majority of credits are taken in the student’s area of specialization. Graduate seminars, art history courses and other studio/academic electives round out the graduate student’s individualized program. Studio visits and critiques with visiting artists are an important aspect of the program.

Within the studio concentration, emphasis is placed on self-motivation, individual investigation, and the development of professional attitudes and skills. Graduate students are expected to demonstrate a serious commitment to their work and to develop mature ideas and forms of expression. Admission to the graduate program is highly selective and competitive.

Graduate students interact formally and informally with the faculty in their areas and with other faculty in the School of the Arts. Each graduate student works closely with a faculty committee that meets twice a semester for critiques and discussions. At the end of the first year, students present their work to their committee and departmental faculty in a candidacy review. At the successful completion of the 60 credits, a thesis exhibition is mounted at the university’s Anderson Gallery or at an alternative venue.

Admission requirements

In addition to the requirements specified in the M.F.A. in Fine Arts section of this bulletin, students are required to submit a portfolio. The portfolio should consist of 20 slides of recent work in the discipline media area of application (i.e., ceramics, fibers, wood/furniture design, glassworking, jewelry/metalworking).

Specialization requirements

M.F.A. in Fine Arts – ceramics, fibers, furniture design, glassworking or jewelry/metalworking

<table>
<thead>
<tr>
<th>Program pattern</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio</td>
<td>42</td>
</tr>
<tr>
<td>Electives, including art history</td>
<td>9</td>
</tr>
<tr>
<td>Graduate seminar</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>
Department of Music

The Department of Music offers the Master of Music degree with tracks in performance (including conducting), music education and composition (admission to the composition track currently is suspended). This degree program allows the student maximum curricular flexibility within the parameters of the program’s full accreditation by the National Association of Schools of Music. The faculty adviser and Graduate Committee are a resource in designing a curriculum that advances the student toward individually defined professional and artistic goals.

Participating in the VCU musical community means involvement in a musically rich environment of studio lessons, small classes, independent study and participation in performing organizations, as well as hearing outstanding professional performers in the classical and jazz traditions. On-campus master classes with major touring artists are an important adjunct to the regular instructional program. Student soloists also may appear with regional and university ensembles. Through the Mary Anne Rennolds Chamber Concerts and other events, the department is one of the region's major sponsors of music performances.

Approximately 330 students choose to major in music, with many other students from throughout the university taking courses and participating in ensembles. There are 20 full-time faculty, over half of whom hold doctorates, in addition to 45 part-time instructors. Among the faculty are internationally recognized performers, composers, researchers and teachers — musician-educators who are active in all facets of the professional music world. The faculty includes members and regular performers with ensembles that include the Richmond and Virginia Symphonies, the New York Philharmonic, the Virginia Opera, Rhythm and Brass, the Great American Music Ensemble and National Chamber Players. The faculty maintains a high level of recognition through each individual's publications, recordings, and international performances and lectures.

The department is housed in three buildings. The principal facility is the W.E. Singleton Center for the Performing Arts, which includes the 502-seat Sonia Vlahcevic Concert Hall, faculty offices, rehearsal rooms and special studios for organ, percussion and piano. The Bowe House contains additional faculty offices and teaching studios. The Music Center has a 347-seat recital hall, classrooms, practice rooms, rehearsal spaces and faculty offices and studios.

VCU offers the diversity of ensemble conducting experiences essential to the development of the conductor. Students in the conducting track ordinarily elect to specialize in band, choral or orchestral conducting. At the discretion of the major teacher, graduate conducting students assist in rehearsing and conducting major departmental ensembles.
The objective of the music education program at VCU is to assist and enhance public and private school music specialists' ability to teach music effectively to every child. Toward this goal, music educators are stimulated by current research in music to seek, evaluate and appropriately implement current ideas and developments in teaching music.

All students work closely with their advisers to select courses consistent with their chosen emphases and the students' individual needs and circumstances. Independent study may fulfill selected course requirements.
Master of Music

Admission requirements

Selection is made on the basis of prior academic performance reflected in undergraduate (and prior graduate) transcripts, an audition or interview, and a writing sample. The applicant should have completed the appropriate undergraduate program or the equivalent for admission as a graduate student.

Appointments for auditions are arranged through the Department of Music office. Though the strong preference is the live audition, performance audition recordings may be sent by applicants for whom traveling to Richmond for an audition would create an unreasonable hardship.

Audition/admission requirements

Performance

Prepare a minimum of 15 minutes of material representative of contrasting styles. Voice performance majors must demonstrate knowledge of Italian, French and German diction. Percussion majors must demonstrate ability in snare drum, keyboard percussion and timpani. All performance majors must demonstrate performance competency equivalent to VCU's Performance Achievement Level VIII (that expected of VCU's Bachelor of Music performance graduates).

Composition

Admission to the composition concentration currently is suspended.

Conducting

Audition will consist of 30 minutes conducting and rehearsing one of the university ensembles utilizing the ensemble's current repertoire. Prospective students also will be expected to demonstrate knowledge of literature in their major area (band, choral, orchestra), keyboard skills appropriate for conducting score study, aural skills appropriate for advanced study in conducting, and performance proficiency on at least one instrument or voice.

Music education

Prospective music education majors should submit a vita/resume, which includes education, background, teaching experience, honors and awards, publications, and any other important information. Applicants also should submit a writing sample on their "Personal Philosophy of Music Education." An interview will be scheduled with the music education faculty prior to
Program and degree requirements

The Master of Music degree has three distinct tracks: performance (appropriate for classical or jazz performers, and vocal or instrumental conductors), composition and music education. All emphases require a minimum of 30 semester credits distributed as outlined below. The department publishes the Handbook for Graduate Studies in Music. This handbook contains detailed information about each curriculum track, advising candidacy, comprehensive examinations, theses and recitals, departmental policies, and other matters important to the process of earning a degree. Every degree-seeking student should obtain a copy of the most recent edition annually.

With the approval of the Graduate Committee of the department, a maximum of six 400-level credits may be presented in fulfillment of the master of music degree requirements when that course work would not normally be expected to be a part of the student’s undergraduate preparation.

Performance Achievement Levels

Ten achievement levels have been established for applied instrumental and vocal study. Each level is explicit in semesters of repertoire, technique, memorization and sight-reading. The table below indicates the levels expected for entrance and required for graduation from each curriculum.

<table>
<thead>
<tr>
<th>Major track</th>
<th>Entrance level</th>
<th>Graduation level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>VII</td>
<td>X</td>
</tr>
<tr>
<td>Composition</td>
<td>VI</td>
<td>VIII</td>
</tr>
<tr>
<td>Music education (recital option)</td>
<td>VI</td>
<td>VIII</td>
</tr>
</tbody>
</table>

Piano proficiency

Piano proficiency appropriate to the pianistic needs of the various fields of concentration must be demonstrated prior to completion of the degree. Students are encouraged to attempt the proficiency examinations early in their graduate study. Specific requirements are given in the Handbook for Graduate Studies in Music.

Recitals/research documents

The performance and composition curricula require five to six credits in culminating projects. Students and their advisory committees will together select one of three options:

A. recital (three credits) and lecture-recital (three credits)
B. recital (three credits) and research document on literature or performance (two credits)
C. two recitals (three credits each)
Music education students have the option of a thesis, recital, project or substitute course work. Specific information regarding recital content and duration and the preparation of research documents is published in the handbook.

**Comprehensive examinations**

Prior to the conferral of a graduate degree, every candidate must pass a written comprehensive examination, which may be supplemented by an oral examination. In addition to music history and theory, the examination will cover other areas associated with the student’s course of study. It is recommended that this examination be taken early in the final semester of study. The examination is offered each semester; specific dates are published in the handbook.

### Master of Music (performance)

<table>
<thead>
<tr>
<th>Courses in the major field</th>
<th>Required courses include applied performance study, six credits; recitals/research document, five to six credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive courses in music</td>
<td>Required courses include MHIS 611-612 Analysis, two to four credits; music history, two to five credits; four to six credits selected from MHIS 690 Bibliography and Research, music history or literature, ensembles, composition, or score reading</td>
</tr>
<tr>
<td>Approved electives</td>
<td>Selected from ensembles, pedagogy, accompanying, Seminar in Theory, MHIS 690 Bibliography and Research, advanced orchestration</td>
</tr>
</tbody>
</table>

| Credits | 30 |

### Master of music (composition)

<table>
<thead>
<tr>
<th>Courses in the major field</th>
<th>Required courses include applied composition, six credits; composition recital and document, five credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive courses in music</td>
<td>MHIS 611-612 Analysis, four credits; APPM 575-576 Score Reading, two credits; MHIS 690 Bibliography and Research, two credits; music history, two credits; MHIS 615 Seminar in Theory, two credits</td>
</tr>
<tr>
<td>Approved electives</td>
<td>Recommended electives include advanced orchestration, performance, ensembles</td>
</tr>
</tbody>
</table>

| Credits | 30 |

### Master of music (music education)

<table>
<thead>
<tr>
<th>Courses in major field</th>
<th>Seminar in Music Education, three credits; MUED 620 Research in Music Education, three credits; thesis, recital or project+, zero to three credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive courses in music</td>
<td>10</td>
</tr>
</tbody>
</table>
MHIS 611-612 Analysis, four credits; music history elective, two credits; music electives selected from performance, conducting, MHIS 690 Bibliography and Research, ensembles, or other APPM, MUSC or MHIS courses approved by the adviser that meet the needs and/or goals of the individual student, four credits

Electives 11-14

MUED 583, MUED 591 and other areas related to the student’s interest area; also may be selected from outside the Department of Music*

30

+ In lieu of thesis, recital or project, a student may choose to complete the Master of Music (education) degree with three credits from the elective category.

* Students planning to pursue doctoral study are strongly encouraged to complete EDUS 662 Educational Measurement and Evaluation.
School of the Arts

Department of Painting and Printmaking

The Department of Painting and Printmaking offers a graduate program of study leading to the M.F.A. in Fine Arts degree. Students admitted to the program are expected to have achieved 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 painting and printmaking graduate program is housed in the new Fine Arts Building with 15 individual graduate studios plus a large graduate printmaking area. Graduate students also have access to four state-of-the-art undergraduate printmaking studios: etching, lithography, screenprinting and digital. These new facilities provide an excellent physical environment for the graduate program with easy access to the other fine art areas of sculpture and crafts. The School of the Arts is ranked among the top 20 graduate fine arts programs in the country by U.S. News & World Report. This ranking is based on the professional reputation of the program’s faculty and on the outstanding accomplishments of the students. 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 of Painting and Printmaking 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.
Master of Fine Arts in Fine Arts –
Painting or Printmaking

The Master of Fine Arts program is based on intensive studio practice at an advanced level in the areas of painting and printmaking. The program is highly selective and is presently limited to 15 participants.

The Master of Fine Arts degree program in painting or printmaking requires 60 credits and is usually completed in two years of full-time study. Most of these credits are in studio areas and are augmented by related courses in specialized academic fields. A graduate seminar meets weekly and addresses topics related to contemporary art and theory. Two semesters of Art and Critical Theory, a course that surveys the major themes of contemporary art criticism, also are required.

Graduate students meet with individual committees composed of three faculty members. Each committee and student conducts an ongoing dialogue and critique. At the end of the second semester students discuss their work at a candidacy critique comprised of their committee and additional faculty. M.F.A. recipients mount a comprehensive exhibition of their work at the university’s Anderson Gallery at the successful conclusion of the program’s second year.

Admission requirements

In addition to the requirements specified in the M.F.A. in Fine Arts section of this bulletin, students are required to submit a portfolio. The portfolio should consist of 12 slides of representative work (painting) or 12 slides of representative work (printmaking).

Specialization requirements

M.F.A. in Fine Arts – painting or printmaking

Program pattern

<table>
<thead>
<tr>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First semester</td>
</tr>
<tr>
<td>Major departmental studio</td>
</tr>
<tr>
<td>Approved graduate elective</td>
</tr>
<tr>
<td>Art and critical theory (PAPR 527)*</td>
</tr>
<tr>
<td>Graduate seminar (PAPR 690)***</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>Second semester</td>
</tr>
<tr>
<td>Major departmental studio</td>
</tr>
</tbody>
</table>
Approved graduate elective 3
Art and critical theory (PAPR 528)* 3
Graduate seminar (PAPR 690)*** 3

---

15

Third semester
Major departmental studio 6
Approved graduate elective 3
Non-studio graduate elective 3
Graduate seminar (PAPR 690)*** 3

---

15

Fourth semester
Major departmental studio** 9
Approved graduate elective 3
Graduate seminar (PAPR 690)*** 3

---

15

60

* Students who received credit as VCU undergraduate students for PAPR 527, 528, may substitute for a non-studio graduate elective.

** An exhibition will be required as a prerequisite for graduation.

*** Enrollment in the graduate seminar is mandatory for the duration of the student's study in the graduate program.
School of the Arts

Department of Photography and Film

The Department of Photography and Film seeks through its graduate program to advance the highest standards of the media of photography and film 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 through the medium with a high degree of sensitivity and proficiency.

James T. Long
Associate Professor and
Department Chair

Graduate program

Master of Fine Arts in Design – Photography
School of the Arts

Master of Fine Arts in Design – Photography and Film

The program is meant to be flexible. Participants in the program may use either traditional or electronic technology to accomplish their personal goals. The program culminates with the presentation of a body of work, both written and visual, that coherently expresses some aspect of the medium.

The successful candidate for the M.F.A. in Design degree will be prepared to function as a working photographer and to begin a career in teaching photography or film.

Admission requirements

Undergraduate preparation

Thirty-six semester hour credits in studio art at the undergraduate level are preferred; they should include a minimum of nine semester hour credits in photography or cinematography. Applicants who do not meet these requirements may be considered.

Portfolio

Photography: A minimum of 20 recent photographs in slide, CD or DVD format.

Cinematography: A minimum of three recent films for which the applicant has had a primary responsibility in production in VHS, DVD or Mini DV format.

Degree requirements

The advanced study of photography and film is both broad and varied. Therefore, the program’s requirements are flexible and determined by the needs of each student on an individual basis. There are, however, a few definite requirements. Each student must have, on completion of the program, knowledge of contemporary art history, a more in-depth knowledge of the history of his/her discipline, be it still photography or film, and an understanding of the critical dialogue that is connected with his/her medium. Courses are suggested for students to meet these requirements, based on their background.

Typical program pattern

Photographic studio 24
Seminar in photography and film 12
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research in photography and film</td>
<td>9</td>
</tr>
<tr>
<td>Approved electives</td>
<td>12</td>
</tr>
<tr>
<td>Graduate exhibition</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>
School of the Arts

Department of Sculpture

"In dreams begin responsibilities," William Butler Yeats once said. And so, too, the sculpture department is in the business of fomenting dreams and encouraging responsibility.

The sculpture department provides an environment of high expectation regarding self-motivation, intellectual capacity and responsibility in order to establish those conditions that promote the student’s ability to construct a thinking self. Students are encouraged to explore technology’s parameters and discover applications to new and traditional modes of expression while continuing to examine the links between art, science, the humanities and the conditions of the world. It is the department’s mission to provide students with the seeds of discernment, the vocabulary and the skills of analysis and synthesis to become participants in today’s dialogue.

The department has six full-time and numerous part-time faculty who represent various directions and attitudes relative to the making of art.

The graduate sculpture program is housed in a new state-of-the-art facility. Students are provided with a generous amount of studio space and are given time, support and encouragement to pursue their independently determined goals.
Both formal and informal contact with faculty are designed into the program. Along with the Department of Sculpture’s faculty, graduate students are exposed to a vigorous visiting artist schedule. Through studio reviews, seminars and research, the students are expected to build an awareness of contemporary and historical definitions of art that will influence their creative work. In addition to their own investigations, graduate students participate in and contribute to the undergraduate program.

While the graduate program is generally a two-year, four-semester in-residence program, students are expected to continue studio pursuits either on campus or at an alternative site throughout the calendar year.

**Admission requirements**

In addition to the requirements specified in the M.F.A. in Fine Arts section of this bulletin, students are required to submit a portfolio. The portfolio should consist of a minimum of 20 slides of representative work, three of which must be drawings (sculpture).

**Speciation requirements**

**M.F.A. in Fine Arts – sculpture**

**Program pattern**

<table>
<thead>
<tr>
<th>First semester</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio (graduate sculpture)</td>
<td>8</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Graduate seminar*</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second semester</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio (graduate sculpture)</td>
<td>8</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Graduate seminar*</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third semester</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio (graduate sculpture)</td>
<td>8</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Graduate seminar*</td>
<td>4</td>
</tr>
</tbody>
</table>
## Fourth semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio (graduate sculpture)</td>
<td>8</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Graduate seminar*</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

* Enrollment in the graduate seminar is mandatory for the duration of the student’s study in the graduate program.*
Department of Theatre

The Department of Theatre offers intensive Master of Fine Arts degree programs in two tracks, the professional theatre degree track and the theatre pedagogy degree track. The professional degree program, realized in cooperation with TheatreVirginia, a constituent member of the League of Resident Theatres, provides graduate students with the educational and professional foundations essential to attaining the highest standards in the art of the theatre. The program prepares actors, directors and designers for careers in regional repertory theatre and commercial production companies throughout the United States. The next professional degree class will be admitted in 2004. The M.F.A. in Theatre Pedagogy Program is individually tailored to prepare the student to enter the field of teaching at the university or college level. Areas of concentration can be chosen from acting, directing, scene design, costume design, voice and speech for the stage, physical acting/stage combat, or theatre history, literature and dramatic criticism.

Applicants are admitted only upon satisfactory demonstration of ability and genuine interest through audition or portfolio presentation, interview, evidence of scholarly writing (essay or research paper) and a minimum 3.0 GPA. The demands of the program are stringent; and only those students who are willing to commit themselves to the work assigned and who are capable of observing strict professional discipline should apply.

The Master of Fine Arts program is based on the philosophy that the nature of theatre requires the creative collaboration of all theatre artists working together. All share the responsibility of solving problems related to planning, preparation and realization of productions.

The Master of Fine Arts curriculum consists of an intensive program of related practical and theoretical studies. The student electing the professional degree track may expect to accomplish much of the degree in close association with TheatreVirginia as an active participant in its program. TheatreVirginia regularly engages members of Actors’ Equity Association, the Society of Stage Directors and Choreographers, and United Scenic Artists.
School of the Arts

Master of Fine Arts in Theatre

Admissions requirements – M.F.A.

In addition to the School of the Arts admission requirements, applicants in theatre must have completed a minimum of 30 semester hour credits in theatre at the undergraduate level. Professional experience will be considered.

An audition or presentation of portfolio is required in addition to a personal interview that the applicant must arrange with the Department of Theatre’s graduate studies adviser.

Special admissions requirements – professional tracks

Acting and directing

Applicants for acting and directing must present upon entrance at least six credit hours of undergraduate production or technical theatre course credit or the equivalent in professional experience.

Design

Applicants in costume and stage design must present upon entrance at least six credit hours of undergraduate performance course credit or the equivalent in professional experience.

Special admissions requirements – theatre pedagogy track

Applicants in theatre pedagogy must present upon entrance at least three credit hours of undergraduate design or technical theatre or the equivalent in professional experience.

Deficiencies in any of these special admissions requirements may be satisfied at VCU, but no graduate credit will be given for them. These prerequisites must be satisfied before the student may apply for candidacy.

Candidacy

After the completion of 15 and before the completion of 24 semester hours, or one full academic year, whichever comes first, the student seeking an advanced degree from the Department of Theatre must apply for candidacy. In addition to maintaining a minimum 3.0 GPA, prior to applying for candidacy, candidates for the professional degree focus options in acting must have completed two roles, at least one with a faculty director (this requirement may be completed in part by the acting practicum required during the first year of matriculation); in directing must have completed one directing assignment (which may be an assistant to the director assignment...
and which may be accomplished in the directing practicum required during the first year of matriculation); in scene design must have served in a design position of substantial authority for at least one production (which may be accomplished in the scene design practicum during the first year of matriculation); in costume design must have completed two costume design classes and served in a position of designated authority (which position may be accomplished in the costume design practicum during the first year of matriculation). Candidates for the theatre pedagogy degree must have completed one assignment as well as completed the theatre pedagogy practicum in classroom observations.

In addition to the requirements listed previously for the various area specialties, the process of evaluation for advancement to candidacy may require the presentation of a portfolio and/or audition; written, oral and/or practical testing; and other devices deemed by the Department of Theatre to be serviceable measurements to determine the prospective success of the candidate at the advanced level in the program. Each candidate for the Master of Fine Arts in Theatre may stand for evaluation for admission to candidacy a second time if the initial evaluation for candidacy is unsuccessful. If after the second evaluation the student is denied candidacy, he or she is obliged to withdraw from the program. In special circumstances where unusual strength in another area is evidenced and when the student is acceptable to the graduate faculty, the student may be invited to transfer into another degree option. The completion of 18 semester hours is the latest point at which a student may transfer into another degree option without lost credits.

**Degree requirements – M.F.A.**

**Core requirements**

Candidates in all degree track options for the M.F.A. in Theatre must satisfy the following core requirements:

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 509, 510, 603, 604</td>
<td>12</td>
</tr>
<tr>
<td>Two courses from the following:</td>
<td>6</td>
</tr>
<tr>
<td>THEA 623, 624 (selected topics in dramatic literature) and THEA 791 (Seminar)*</td>
<td></td>
</tr>
<tr>
<td>Creative project/thesis</td>
<td>6</td>
</tr>
</tbody>
</table>

* Seminar subjects may include dramaturgy, African-American theatre, women’s theatre, history of Shakespearean production, Asian theatre practice, political theatre, research/performance or other topics.

**Program track requirements – Professional theatre track**

<table>
<thead>
<tr>
<th>Professional Studio: Acting</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be repeated six times for a total of 60 credits</td>
<td>60</td>
</tr>
</tbody>
</table>

Program includes:
Acting
Voice
Physical acting
Practica
Professional internships
Core
Project and project evaluation

Professional studio: Directing
To be repeated six times for a total of 60 credits
Program includes:
  Directing
  Minor
  Electives
  Practica
  Professional internships
  Core
  Project and project evaluation

Professional studio: Costume design
To be repeated six times for a total of 60 credits
Program includes:
  Costume design
  Costume history
  Rendering
  Computer drafting
  Scene design
  Scene painting
  Practica

Professional studio: Scene design
To be repeated six times for a total of 60 credits
Program includes:
  Stage design
  Scene painting
  Costume design or lighting design
  Directing
  Computer drafting
  History of interior design and architecture
  Practica
  Professional internships
  Core
  Project and project evaluation

Program track requirements – Theatre pedagogy track
Theatre pedagogy
Program includes:
  Directing, acting, voice or physical acting, 12 credits
  Elective, including design, 12 credits
  Core, 27 credits (includes Theatre Pedagogy)
  Internship, 12 credits

Theatre pedagogy candidates select a major area specialty, present a minor in either acting,
directing or literature, as well as participate in practicum situations both in the department and at TheatreVirginia.
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.

Graduate degree programs

The School of Business offers degree programs leading to the Master of Arts in Economics, Master of Accountancy, Master of Business Administration, Master of Business Administration/Master of Science in Information Systems, Master of Science in Business, Master of Science in Information Systems, Master of Taxation, and the Ph.D. in Business and Pharm.D./M.B.A.

Post-baccalaureate Graduate Certificate in Real Estate and Land Development

The School of Business offers a Post-baccalaureate Graduate Certificate in Real Estate and Land Development. This program is offered both on campus and via the Internet.

Post-baccalaureate undergraduate certificate programs

The School of Business offers post-baccalaureate undergraduate certificates in accounting, human resource management, information systems, marketing, and real estate and land development. For more information about these programs, see the VCU Undergraduate Bulletin.

Enrollment in graduate courses
Because of accreditation policies, students may not enroll in any graduate business courses (except MGMT 500) for credit without first being admitted formally to a graduate degree or graduate certificate program.

Exceptions may be granted by the director of graduate programs in business to students with superior academic records. No credit will be given for graduate classes taken prior to acceptance into a graduate degree program in business or economics unless such an exception has been granted. A form to request such an exception is available from the Graduate Studies in Business Office.

A "graduate transient" classification may be granted to a student in good standing in any graduate school accredited by the Association to Advance Collegiate Schools of Business (AACSB) who desires to enroll in the School of Business for any one semester or summer session. Students will be required to present certificates of graduate standing but will not have to submit the data normally required for an admission decision. A form is available from the Graduate Studies in Business Office to facilitate transient enrollment.

Transfer credit

A maximum of six semester hours of acceptable graduate credit earned in a degree program at an AACSB-accredited institution may be transferred and applied toward the graduate degree. Acceptance of transfer credit is made at the discretion of the director of graduate programs in business.

All transfer work must be at the “A” or “B” grade level. Students must be in good standing both at VCU and at the institution from which the credits were earned. Additionally, students must have had full admission during the time these credits were earned at that college or university. Transfer credit shall not be older than seven years at the time the degree is awarded.

Credit to be earned at other institutions after acceptance in the graduate 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 only under unusual circumstances such as job transfers or other extenuating circumstances.

Advising program

All students admitted to graduate programs are assigned advisers. Students are expected to work with their advisers to plan their graduate programs. 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. The curriculum plan described on the form must be approved by both the adviser and the director of graduate programs in business. Courses taken without approval are taken at the student’s own risk.
Students are responsible for knowing and fulfilling all general and specific requirements relating to the completion of their degree programs. Answers to specific questions may be obtained from the Graduate Studies in Business Office, (804) 828-4622.

Change in program or concentrations

Students who wish to change their graduate programs or areas of concentration within the school must make that request in writing to the director of graduate programs in business. The director will advise them of the necessary requirements and whether the change is possible. The student must be in good standing at the time of change.

Notification

The student should notify in writing both Records and Registration and Graduate Studies in Business, 1015 Floyd Ave., P.O. Box 844000, Richmond, VA 23284-4000, of any address changes. Students who do not wish to register in any given semester must notify in writing the Graduate Studies in Business Office of their intent not to register and their plans for continuation in the program.

Student appeals

Appeals for exceptions to policies or academic standards may be made in writing to the Graduate Studies in Business Office, School of Business, Virginia Commonwealth University, 1015 Floyd Ave., Richmond, VA 23284-4000.

Individual research projects

Various opportunities exist for students to work closely with faculty on individual research projects. Courses in the School of Business numbered 690, 693 and 697 are suitable for this purpose. No more than one research course may be taken as part of a master’s program.

Registration in all research courses requires approval of both the student’s adviser and the director of graduate programs in business. Forms for this purpose are available upon request from the Graduate Studies in Business Office. Students are expected to seek permission to register in research courses by the end of the semester or summer session preceding the semester or summer session for which registration is desired. The written research report is required to be filed at the Graduate Studies in Business Office no later than the last day of classes of the semester or summer session in which the course is taken.

Financial aid

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.
General requirements for master’s degrees in the School of Business

In addition to the general academic regulations stated in the Graduate Studies at VCU chapter of this bulletin and the regulations listed earlier in this section, master’s students in the School of Business are subject to the following requirements:

1. A course for which a passing grade was received cannot be repeated without prior written permission of the director of graduate programs in business. An appeal to the School of Business Master’s Committee is required.

2. Students who satisfy all requirements except the 3.0 average may be allowed to take a maximum of six additional credit hours to raise the average. Students are required to appeal to the School of Business Master’s Committee for permission.

3. A foundation course may be waived by the director of graduate programs in business, based on satisfactory completion of equivalent undergraduate work prior to acceptance in the program. CLEP credit at the “B” or higher level may be accepted in lieu of foundation courses with permission. The waiver of courses is at the discretion of the School of Business.

4. A maximum of two one-year extensions may be granted by the director of graduate programs in business in the time allowed to complete a degree if satisfactory progress has been demonstrated on the part of the student requesting an extension. For extensions, write to the director of graduate programs in business.

5. Students are not permitted to take undergraduate courses equivalent to foundation courses once they are admitted to the graduate program without the written permission of the director of graduate programs in business.

6. Grades received for undergraduate courses are not included in the calculation of the cumulative graduate GPA.

7. All students admitted into a program must have earned a bachelor’s degree or its equivalent. To be accepted in the graduate program, in addition to other requirements, applicants must be in good standing at the college or university they previously attended.

Department chairs

Ruth W. Epps
Professor and Chair, Department of Accounting

Frank J. Franzak
Associate Professor and Chair, Department of Marketing and Business Law

Glenn H. Gilbreath
Professor and Chair, Department of Management

Edward L. Millner
Professor and Chair, Department of Economics

Richard T. Redmond
Associate Professor and Chair, Department of Information Systems
David E. Upton
Professor and Chair, Department of Finance, Insurance and Real Estate

Graduate courses in business and economics

The School of Business courses are grouped into seven categories: accounting; economics; finance, insurance and real estate; fast track M.B.A.; information systems; management; marketing and business law.

Courses at the 500 level may not be included in the 30 semester credits of advanced work required of any of the master's degrees offered by the School of Business.
School of Business

Master of Accountancy

The integrated 150-hour professional program gives students the opportunity to earn both a Bachelor of Science and Master of Accountancy degrees upon completion of the required 150 credit hours of study. It is an integrated program consisting of 120 hours of undergraduate credits and 30 hours of graduate credits. A student declares his/her major in accounting at the end of the sophomore year. He/she enters the 150-hour program at the beginning of the junior year and earns both degrees with a major in accounting and a concentration in information systems, finance and auditing, or another area of business. The 30 graduate credits consist of 10 courses, at least five of which the student may select from an area outside of accounting. The flexibility of electives gives students the ability to design a broad program, which supports and enhances career objectives.

A student can be guaranteed admission to the program in one of two ways:

1. Students who are participants in the University Honors Program and maintain the required scholastic standards throughout the freshman and sophomore years are guaranteed admission into the 150-hour program at the end of the sophomore year.

2. Students who rank in the top 15 percent of their high school class or who have a minimum unweighted 3.0 GPA, have a minimum combined SAT score of 1260 obtained in a single setting, and have a VCU undergraduate cumulative GPA of at least 3.5 at the end of their sophomore year are guaranteed admission.

Students who do not meet the criteria for guaranteed admission may seek admission to the program by submitting a complete application form for graduate study, including GMAT test score. Students who apply in this manner may be admitted, depending upon the cumulative GPA at the completion of the university general education requirements and the business foundation requirements along with satisfactory performance on the GMAT.

Program requirements – 150-hour professional program

Information systems track

Recommended course sequence for the 150-hour program with an information systems track:

<table>
<thead>
<tr>
<th>First year</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 and 200 Writing and Rhetoric Workshop I and II</td>
<td>3 3</td>
</tr>
<tr>
<td>MGMT 171 and 212 Applications and Calculus</td>
<td>3 3</td>
</tr>
<tr>
<td>Human behavior elective</td>
<td>3 -</td>
</tr>
<tr>
<td>Choose from anthropology, psychology or sociology</td>
<td></td>
</tr>
<tr>
<td>Institutional studies elective</td>
<td>3 -</td>
</tr>
<tr>
<td>POLI 103 Introduction to Political Science</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Credits</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Natural science elective</td>
<td>4</td>
</tr>
<tr>
<td>Choose from biology and laboratory, chemistry and laboratory, or physics and laboratory</td>
<td></td>
</tr>
<tr>
<td>Restricted elective</td>
<td>-</td>
</tr>
<tr>
<td>Non-business elective</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>16</td>
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</table>

**Second year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature and language</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 201 or foreign language or philosophy elective</td>
<td>-</td>
</tr>
<tr>
<td>ACCT 203 and 204 Introduction to Accounting I and II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 210 and 211 Principles of Economics I and II</td>
<td>3</td>
</tr>
<tr>
<td>INFO 360 Business Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 301 Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 121 or 321 Effective Speech or Speech for Business and Professions</td>
<td>-</td>
</tr>
<tr>
<td>ENGL 304 Advanced Composition</td>
<td>-</td>
</tr>
<tr>
<td>Visual and performing arts elective</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Note: Upon completion of the foundation program, students are expected to have competency in computer-based word processing and spreadsheet skills. Students without this competency must complete INFO 160, 161 or 162, or equivalent.

**Third year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 303 and 304 Intermediate Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 307 Accounting Systems</td>
<td>-</td>
</tr>
<tr>
<td>MGMT 319 Organization and Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 320 Production Operations</td>
<td>-</td>
</tr>
<tr>
<td>MRBL 308 Introduction to Marketing</td>
<td>3</td>
</tr>
<tr>
<td>CMSC 255 Structured Programming</td>
<td>3</td>
</tr>
<tr>
<td>ECON 303 Managerial Economics</td>
<td>-</td>
</tr>
<tr>
<td>INFO 361 Systems Analysis and Design</td>
<td>-</td>
</tr>
<tr>
<td>MGMT 325 Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15</td>
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</tbody>
</table>

Note: If INFO 161 and 162 are taken during the sophomore year instead of a non-business elective, then a non-business elective should be substituted for a business elective during the junior year.

**Fourth year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
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<td>INFO 362 Computer Hardware and Software</td>
<td>3</td>
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<tr>
<td>ACCT 306 Cost Accounting</td>
<td>-</td>
</tr>
<tr>
<td>MRBL 481 Business Law for Accountants I</td>
<td>-</td>
</tr>
<tr>
<td>ACCT 513 Financial Reporting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 405 Tax Accounting</td>
<td>-</td>
</tr>
<tr>
<td>FIRE 311 Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 401 Government and Not-for-profit Accounting</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Course</td>
<td>Credits</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>MGMT 434 Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>INFO 464 Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>INFO 370 Fundamentals of Data Communication</td>
<td>-</td>
</tr>
<tr>
<td>MGMT 524 Quantitative Management</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Fifth year</strong></td>
<td></td>
</tr>
<tr>
<td>ACCT 506 Auditing</td>
<td>3</td>
</tr>
<tr>
<td>INFO 610 Analysis and Design of Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>INFO 620 Data Communication</td>
<td>3</td>
</tr>
<tr>
<td>INFO 630 Information Engineering</td>
<td>-</td>
</tr>
<tr>
<td>INFO 640 Information Systems and Knowledge Management</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 682 Corporate Taxation</td>
<td>-</td>
</tr>
<tr>
<td>ACCT 601 Accounting Theory</td>
<td>-</td>
</tr>
<tr>
<td>Undergraduate non-business elective</td>
<td>-</td>
</tr>
<tr>
<td>Graduate accounting elective</td>
<td>-</td>
</tr>
<tr>
<td>Graduate elective (accounting or information systems)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Finance and auditing track</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Recommended course sequence for the 150-hour program with a finance and auditing track:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>First year</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL 101 and 200 Writing and Rhetoric Workshop I and II</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 171 and 212 Applications and Calculus</td>
<td>3</td>
</tr>
<tr>
<td>Human behavior elective</td>
<td>3</td>
</tr>
<tr>
<td>Choose from anthropology, psychology or sociology</td>
<td>-</td>
</tr>
<tr>
<td>Institutional studies elective</td>
<td>3</td>
</tr>
<tr>
<td>POLI 103 Introduction to Political Science</td>
<td>-</td>
</tr>
<tr>
<td>Natural science elective</td>
<td>4</td>
</tr>
<tr>
<td>Choose from biology and laboratory, chemistry and laboratory, or physics and laboratory</td>
<td>-</td>
</tr>
<tr>
<td>Restricted elective</td>
<td>-</td>
</tr>
<tr>
<td>Non-business elective</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>16</td>
</tr>
<tr>
<td><strong>Second year</strong></td>
<td></td>
</tr>
<tr>
<td>Literature and language</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 201 or foreign language or philosophy elective</td>
<td>-</td>
</tr>
<tr>
<td>ACCT 203 and 204 Introduction to Accounting I and II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 210 and 211 Principles of Economics I and II</td>
<td>3</td>
</tr>
<tr>
<td>INFO 360 Business Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 301 Business Statistics</td>
<td>-</td>
</tr>
<tr>
<td>SPCH 121 or 321 Effective Speech or Speech for Business and Professions</td>
<td>-</td>
</tr>
<tr>
<td>ENGL 304 Advanced Composition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>
Visual and performing arts elective  

Note: Upon completion of the foundation program, students are expected to have competency in computer-based word processing and spreadsheet skills. Students without this competency must complete INFO 160, 161 or 162, or equivalent.

<table>
<thead>
<tr>
<th>Third year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 303 and 304 Intermediate Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 307 Accounting Systems</td>
<td>-</td>
</tr>
<tr>
<td>MGMT 319 Organization and Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 320 Production Operations</td>
<td>-</td>
</tr>
<tr>
<td>MRBL 308 Introduction to Marketing</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 311 Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>ECON 303 Managerial Economics</td>
<td>-</td>
</tr>
<tr>
<td>FIRE 312 Intermediate Financial Management</td>
<td>-</td>
</tr>
<tr>
<td>MGMT 325 Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Note: If INFO 161 and 162 are taken during the sophomore year instead of a non-business elective, then a non-business elective should be substituted for a business elective during the junior year.

<table>
<thead>
<tr>
<th>Fourth year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 306 Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MRBL 481 Business Law for Accountants I</td>
<td>-</td>
</tr>
<tr>
<td>ACCT 405 Tax Accounting</td>
<td>-</td>
</tr>
<tr>
<td>ACCT 506 Auditing</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 434 Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 314 Investments</td>
<td>-</td>
</tr>
<tr>
<td>ACCT 401 Government and Not-for-profit Accounting</td>
<td>-</td>
</tr>
<tr>
<td>MGMT 524 Quantitative Management</td>
<td>-</td>
</tr>
<tr>
<td>ACCT 513 Financial Reporting</td>
<td>3</td>
</tr>
<tr>
<td>Non-business elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fifth year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 604 Auditing</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 621 Cases in Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 635 Investments and Security Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 650 Derivatives</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 623 Corporate Finance</td>
<td>-</td>
</tr>
<tr>
<td>ACCT 682 Corporate Taxation</td>
<td>-</td>
</tr>
<tr>
<td>ACCT 601 Accounting Theory</td>
<td>3</td>
</tr>
<tr>
<td>Undergraduate non-business elective</td>
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</tr>
<tr>
<td>Graduate accounting elective</td>
<td>-</td>
</tr>
<tr>
<td>Graduate elective (accounting or finance)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>
### General business track

Recommended course sequence for the 150-hour program with other business track:

<table>
<thead>
<tr>
<th>First year</th>
<th>credits</th>
<th>fall</th>
<th>spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 and 200 Writing and Rhetoric Workshop I and II</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MGMT 171 and 212 Applications and Calculus</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Human behavior elective</td>
<td>3</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Choose from anthropology, psychology or sociology</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Institutional studies elective</td>
<td>3</td>
<td>-</td>
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</tr>
<tr>
<td>POLI 103 Introduction to Political Science</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Natural science elective</td>
<td>4</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Choose from biology and laboratory, chemistry and laboratory, or physics and laboratory</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Restricted elective</td>
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<td></td>
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<tr>
<td>Non-business elective</td>
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<td>6</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>15</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Second year</th>
<th>credits</th>
<th>fall</th>
<th>spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature and language</td>
<td>3</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>ENGL 201 or foreign language or philosophy elective</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>ACCT 203 and 204 Introduction to Accounting I and II</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 210 and 211 Principles of Economics I and II</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>INFO 360 Business Information Systems</td>
<td>3</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>MGMT 301 Business Statistics</td>
<td>3</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>SPCH 121 or 321 Effective Speech or Speech for Business and Professions</td>
<td>-</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGL 304 Advanced Composition</td>
<td>-</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Visual and performing arts elective</td>
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<td>2</td>
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<td><strong>Total</strong></td>
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<td><strong>14</strong></td>
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</tbody>
</table>

Note: Upon completion of the foundation program, students are expected to have competency in computer-based word processing and spreadsheet skills. Students without this competency must complete INFO 160, 161 or 162, or equivalent.

<table>
<thead>
<tr>
<th>Third year</th>
<th>credits</th>
<th>fall</th>
<th>spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 303 and 304 Intermediate Accounting</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACCT 307 Accounting Systems</td>
<td>-</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MGMT 319 Organization and Management</td>
<td>3</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>MGMT 320 Production Operations</td>
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<td>3</td>
<td></td>
</tr>
<tr>
<td>MRBL 308 Introduction to Marketing</td>
<td>3</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>FIRE 311 Financial Management</td>
<td>-</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 303 Managerial Economics</td>
<td>-</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Undergraduate track (300 level)</td>
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<td>-</td>
<td></td>
</tr>
<tr>
<td>MGMT 325 Organizational Communication</td>
<td>3</td>
<td>-</td>
<td></td>
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</tbody>
</table>
Note: If INFO 161 and 162 are taken during the sophomore year instead of a non-business elective, then a non-business elective should be substituted for a business elective during the junior year.

### Fourth year

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ACCT 306 Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MRBL 481 Business Law for Accountants I</td>
<td>-</td>
</tr>
<tr>
<td>ACCT 405 Tax Accounting</td>
<td>-</td>
</tr>
<tr>
<td>ACCT 506 Auditing</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 434 Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>Undergraduate track (400 level)</td>
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</tr>
<tr>
<td>ACCT 401 Government and Not-for-profit Accounting</td>
<td>-</td>
</tr>
<tr>
<td>MGMT 524 Quantitative Management</td>
<td>-</td>
</tr>
<tr>
<td>ACCT 513 Financial Reporting</td>
<td>3</td>
</tr>
<tr>
<td>Non-business elective</td>
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### Fifth year

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>ACCT 604 Auditing</td>
<td>3</td>
</tr>
<tr>
<td>Graduate track (600 level)</td>
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</tr>
<tr>
<td>ACCT 682 Corporate Taxation</td>
<td>-</td>
</tr>
<tr>
<td>ACCT 601 Accounting Theory</td>
<td>3</td>
</tr>
<tr>
<td>Undergraduate non-business elective</td>
<td>3</td>
</tr>
<tr>
<td>Graduate accounting elective</td>
<td>-</td>
</tr>
<tr>
<td>Graduate elective (accounting or track)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Master of Accountancy program for students with a bachelor’s degree in accounting

Students who have already completed a bachelor’s degree in the field of accounting from an accredited institution may be admitted directly to the Master of Accountancy program. The graduate degree requires completion of 10 graduate courses. There are four 600-level required accounting courses and six 600-level courses selected from the three tracks of interest. Students applying directly to the Master of Accountancy program may be admitted depending upon the cumulative grade-point average obtained in the last 60 credits of course work, plus satisfactory performance on the GMAT.

### Program requirements

**Department of Accounting prerequisites:**
- ACCT 401 Governmental and Not-for-profit Accounting (if not previously taken)
- ACCT 506 Auditing
- ACCT 513 Financial Reporting
Graduate accounting required core courses:
ACCT 601 Financial Accounting Theory
ACCT 604 Auditing
ACCT 606 International Accounting
ACCT 682 Financial Reporting

Graduate elective courses:
Students are permitted to select six 600-level courses from the three tracks of interest (information systems, finance and auditing, or general business). Students are encouraged to take the following elective courses for specialty training in the following three tracks. The final selection of elective courses that will be taken for graduation can be negotiated with the student’s graduate academic adviser.

Information systems – students selecting this track may be required to complete additional undergraduate prerequisite courses before taking the graduate information systems electives.
INFO 610 Analysis and Design of Database Systems
INFO 620 Data Communication
INFO 630 Information Engineering
INFO 640 Information Systems and Knowledge Management
One graduate elective in accounting
One graduate elective in either accounting or information systems

Finance and auditing
FIRE 621 Cases in Financial Management
FIRE 635 Investments and Security Analysis
Two graduate electives in finance
One graduate elective in accounting
One graduate elective in accounting or finance

Other approved business tracks – students will work with their advisers to identify a separate track of study in one of the following approved areas: economics, international business, management, marketing or another area negotiated with the faculty adviser. Depending upon the track of study selected, students may have to complete additional undergraduate prerequisites. The number of graduate electives that must be taken is the same, regardless of the area of study:
- four graduate electives in selected track
- one graduate elective in accounting
- one graduate elective in accounting or selected track

Master of Accountancy program for students with a bachelor’s degree in fields other than accounting
Students who have already completed a bachelor’s degree in a field of study other than accounting from an accredited institution may be admitted directly to the Master of Accountancy program. The graduate degree requires completion of 10 graduate courses. There are four 600-level required accounting courses and six 600-level courses selected from the three tracks of interest. Students applying directly to the Master of Accountancy program may be admitted depending upon the cumulative grade-point average obtained in the last 60 credits of course work, plus satisfactory performance on the GMAT.
Program requirements

School of Business foundation requirements (up to 12 semester credits)
ACCT 507 Fundamentals of Accounting
And three of the following courses, depending upon track of interest:
   ECON 500 Concepts in Economics
   FIRE 520 Financial Concepts of Management
   MGMT 500 Quantitative Foundation for Decision Making
   MGMT 524 Statistical Elements of Quantitative Management
   MGMT 540 Management Theory and Practice
   MRBL 530 Fundamentals of the Legal Environment of Business
   MRBL 570 Concepts and Issues in Marketing

Department of Accounting prerequisites (up to 21 semester credits)
ACCT 303 Financial Accounting I
ACCT 304 Financial Accounting II
ACCT 306 Cost Accounting
ACCT 401 Governmental and Not-for-profit Accounting
ACCT 405 Tax Accounting
ACCT 506 Auditing
ACCT 513 Financial Reporting

Graduate accounting required core courses
All master’s students must complete the following four graduate courses:
   ACCT 601 Financial Accounting Theory
   ACCT 604 Auditing
   ACCT 606 International Accounting
   ACCT 682 Corporate Taxation

Graduate elective courses
Students permitted to select six 600-level courses from the three tracks of interest (information systems, finance and auditing, or general business). Students are encouraged to take the following electives for specialty training in the tracks. The final selection of elective courses that will be taken for graduation can be negotiated with the student’s graduate academic adviser.

Information systems – students selecting this track may be required to complete additional undergraduate prerequisite courses before taking the graduate INFO electives:
   INFO 610 Analysis and Design of Database Systems
   INFO 620 Data Communication
   INFO 630 Information Engineering
   INFO 640 Information Systems and Knowledge Management
   One graduate elective in accounting
   One graduate elective in either accounting or information systems

Finance and auditing
FIRE 621 Cases in Financial Management
FIRE 635 Investments and Security Analysis
Two graduate electives in finance
One graduate elective in accounting
One graduate elective in accounting or finance

**Other approved business tracks** – students will work with their advisers to identify a separate track of study in one of the following approved areas: economics, international business, management, marketing or another area negotiated with the faculty adviser. Depending upon the track of study selected, students may have to complete additional undergraduate prerequisites. The number of graduate electives that must be taken is the same, regardless of the area of study:

- four graduate electives in selected track
- one graduate elective in accounting
- one graduate elective in accounting or selected track
Master of Business Administration programs

The purpose of the Master of Business Administration programs at VCU is to prepare individuals for the responsibilities of management. As students at VCU, individuals will learn the functions and techniques of effective management. The student also will come to understand the environmental and economic factors that affect decision making in organizations. In short, the student will know what to do as future events unfold that affect his/her firm or organization.

An M.B.A. from VCU benefits students at various points in their career. Individuals who have recently received their baccalaureate may choose to refine their business skills while their undergraduate training is fresh. Individuals with work experience often find that an M.B.A. is the key to rapid promotion or a career change. Finally, an M.B.A. from VCU meets the needs of students who recognize that the best preparation for an uncertain future is continuous learning.

School of Business students have diverse interests, backgrounds and levels of business experience. Therefore, the school provides a choice of programs by which the students may obtain an M.B.A. The M.B.A. is designed for students who wish to attend school in the evening on either a full- or part-time basis. The dual M.B.A./M.S. Information Systems degree program allows students to pursue both degrees simultaneously. The Fast Track Executive M.B.A. program is designed for applicants with at least six years of business experience who are interested in attending class on the weekends. The Pharm.D./M.B.A. is designed for students who want to add business skills to their training as pharmacists.
Master of Business Administration programs

The M.B.A. program

The curriculum for the M.B.A. program is flexible and is designed for students with diverse undergraduate backgrounds. The M.B.A. student may elect an M.B.A. without a concentration or may prefer an M.B.A. with a single or double concentration. Concentrations are available in nine areas: accounting, decision sciences, economics, finance, human resource management and industrial relations, information systems, marketing, real estate and urban land development, or risk management and insurance.

Most classes are held in the evening to accommodate working students’ schedules. Classes typically meet one evening a week from 7 to 9:40 p.m. A limited number of classes meet twice a week, either in the morning from 7 to 8:15 a.m., or in the early evening from 5:30 to 6:45 p.m. M.B.A. courses also are offered at Innsbrook, an office park and residential area in the suburban west end of Richmond.

Students may choose to include international study or an exchange program in their course of study. In recent years, credit has been earned for programs in Italy, China, France, Germany, Hong Kong, Indonesia and Mexico.

Admission criteria

Admission criteria include undergraduate performance, Graduate Management Admissions Test (GMAT) scores, intellectual capacity, experience and other indicators of the ability to pursue graduate study profitably. Deadlines are as follows:

- Spring: Nov 1
- Summer: Mar 1
- Fall: Apr 1/early decision
  June 1/final deadline

Requirements for the M.B.A.

- A course in calculus is a prerequisite for the M.B.A. This prerequisite may be waived for students who present satisfactory equivalent preparation. Applicants who have not met this prerequisite may take the course after admission.

- Students are expected to enter the program with basic computing proficiency. Specific expectations will be provided by the Graduate Studies in Business Office. Specific means of evaluating and correcting any deficiency also will be identified.

- The program includes seven foundation courses, which may be waived for students who...
have taken the equivalent material at the undergraduate level. These courses must be
taken at the graduate level after the student has been admitted.

**Foundation courses**

ACCT 507 Fundamentals of Accounting 3
ECON 500 Concepts in Economics 3
FIRE 520 Financial Concepts of Management 3
MGMT 524 Statistical Elements of Quantitative Management 3
MGMT 540 Management Theory and Practice 3
MRBL 530 Fundamentals of the Legal Environment of Business 3
MRBL 570 Concepts and Issues in Marketing 3

**Advanced courses**

Each student must begin the advanced portion of the program with the courses below in each of the first two semesters. Full-time students will take additional courses from the remainder of the Advanced Program.

**Semester one**

INFO 661 Information Systems for Managers 3
MGMT 641 Organizational Leadership and Project Team Management 3

**Semester two**

INFO 664 Emerging Information Technologies 3
MGMT 675 Operations Management and Decision Technology 3

**Remainder of the Advanced Program**

ACCT 608 Managerial Accounting Concepts 3
ECON 610 Managerial Economics 3
FIRE 621 Cases in Financial Management 3
MGMT 642 Business Policy 3
MRBL 671 Marketing Management 3
Electives* 9

Total credits in Advanced Program 36

* Electives must be 600-level courses. A student’s choice of electives must include one or more courses that are designated to have substantial global, entrepreneurial and/or experiential components. Students can establish a concentration by taking all electives in a single area. The Graduate Studies in Business Office maintains current lists of approved electives for each concentration and for the general program.
The Fast Track Executive Master of Business Administration program provides an opportunity for rising executives and professionals with six or more years of management-level work experience to obtain a master’s degree in business administration. Participants gain a wide range of new skills and knowledge by combining course work with day-to-day business activities.

The program is targeted to rising business executives, entrepreneurs, nonprofit managers and service professionals. It differs from other Master's programs at VCU as a result of its unique modular curriculum, which integrates components of communication, technology, service/quality, globalism and strategy. The modules include 1) team building and leadership, 2) business foundations, 3) analysis and decisions, 4) global challenges, 5) organizational culture, 6) productivity and innovation, and 6) strategic management.

The Fast Track Executive M.B.A. Program is a lockstep program that meets alternating weekends, Fridays, 12:30 to 6:15 p.m. and Saturdays, 8 a.m. to 2:15 p.m. The program can be completed in approximately 18 months. For more information, contact the Fast Track Executive M.B.A. Office at (804) 828-3939 or fax (804) 828-6717.

Requirements for the Fast Track Executive M.B.A. program

The program is designed for students with familiarity with calculus, statistics, economics, finance and accounting. The student’s adviser will review the student’s educational and professional background to determine the extent to which the student has satisfied the prerequisites. Those with outstanding prerequisites will be required to attend one or more training sessions to remove any deficiencies.

The program consists of 13 courses that are divided into seven integrated modules.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMBA 608</td>
<td>Organizational Culture (course 1)</td>
<td>3</td>
</tr>
<tr>
<td>FMBA 609</td>
<td>Productivity and Innovation (course 1)</td>
<td>3</td>
</tr>
<tr>
<td>FMBA 610</td>
<td>Productivity and Innovation (course 2)</td>
<td>3</td>
</tr>
<tr>
<td>FMBA 611</td>
<td>Strategic Management (course 1)</td>
<td>3</td>
</tr>
<tr>
<td>FMBA 612</td>
<td>Strategic Management (course 2)</td>
<td>3</td>
</tr>
<tr>
<td>FMBA 613</td>
<td>Strategic Management (course 3)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits:** 39
Pharm.D./M.B.A. program

The Pharm.D./M.B.A. program seeks to prepare pharmacists for careers that encompass pharmacy and business theories and principles. The program is designed to take advantage of efficiencies and electives in both the Pharm.D. and M.B.A. programs. Students in the combined program can earn both degrees and save as much as one year or more over the time required for enrolling in the programs separately.

Students may be admitted in the program during their first year of enrollment in the Pharm.D. program. Applicants must be an enrolled student in the Pharm.D. program, have demonstrated a good academic record and have successfully completed the Graduate Management Admission Test (GMAT).

To get both degrees, students will take all pharmacy courses unless waived, the seven business foundation courses, the nine M.B.A. core courses and three elective courses. The elective M.B.A. courses may be taken from pharmacy administration courses at the 600 level, and a combination of a business seminar course and an elective advanced pharmacy practice experience in pharmacy management. The business foundation courses can be taken during the first two years in the pharmacy program with summer session(s). The M.B.A. core courses can be taken during the third and fourth years in the pharmacy program. The business electives can be taken during the fourth and fifth years in the combined program.

Curriculum requirements

To earn both degrees, students will complete the following requirements. For the Pharm.D. program, all required Pharm.D. prerequisite and required courses must be taken unless waived by the appropriate representative of the School of Pharmacy. For the M.B.A. program requirements, the foundation courses listed below must be taken. Courses may be waived for students who have taken the equivalent material at the undergraduate level.

ACCT 507 Fundamentals of Accounting
ECON 500 Concepts in Economics
FIRE 520 Financial Concepts of Management
MGMT 524 Statistical Elements of Quantitative Management
MGMT 540 Management Theory and Practice
MRBL 530 Fundamentals of the Legal Environment of Business
MRBL 570 Concepts and Issues in Marketing

The following nine courses of the M.B.A. Advanced Program will be required for each student:
Lockstep Semester I: (to be taken at same time)
INFO 661 Information Systems for Managers
MGMT 641 Organization Leadership and Project Team Management

Lockstep Semester II: (to be taken at same time)
INFO 664 Emerging Issues in Information Technology
MGMT 675 Operations Management

Remaining Advanced Program Courses:
ACCT 608 Managerial Accounting
ECON 610 Managerial Economics
FIRE 621 Cases in Financial Management
MGMT 642 Business Policy
MRBL 671 Marketing Management

Three M.B.A. elective courses may be taken in the School of Business or by completing approved Pharm.D. electives and/or an applied pharmacy practice experience in pharmacy management, as individually approved by the director of graduate programs in the School of Business.

The key to successful completion of the Pharm.D./M.B.A. dual degree program will be timely and continuing advising from both the appropriate School of Pharmacy adviser and the director of graduate programs in the School of Business. For this reason, students are encouraged to seek admission to the dual degree program as early in their Pharm.D. program as possible.

Admission requirements

Students interested in pursuing the Pharm.D./M.B.A. dual degree program must first obtain admission to the Pharm.D. program. Admitted Pharm.D. students who desire to add the M.B.A. degree to their program must apply to the M.B.A. program using the Application for Graduate Study found at the Graduate School Web site: http://www.vcu.edu/graduate.

A complete application to the M.B.A. program includes:

- Application for Graduate Study and application fee.
- Request for In-state Tuition Rates (as applicable).
- Three letters of reference, including a letter of support from the School of Pharmacy.
- Official transcripts from all universities previously attended, including current VCU transcript.
- Current GMAT test score.
- Interview with director of graduate programs in School of Business.

Tuition and financial aid considerations

Upon admission to the M.B.A. program, a Pharm.D. student will be considered a dual degree-seeking student. Students will most often register for a mix of School of Business courses and School of Pharmacy courses each semester of the program. The School of Pharmacy and School of Business have agreed that dual degree-seeking students will be considered Pharm.D. students.
in years P1, P2, P3 and P5. Students will be considered M.B.A. (graduate) students in year P4. When categorized as Pharm.D., a student will be charged tuition and fees from the School of Pharmacy and will be eligible to receive financial aid awards as a Pharm.D. student. When categorized M.B.A. (graduate) a student will be charged the graduate tuition and fee rate of the Monroe Park Campus and will be eligible to receive financial aid awards as a graduate student.
Master of Business Administration programs

M.B.A./M.S. in Information Systems

Students can earn both M.B.A. and M.S. in Information Systems degrees by having 12 credits counted toward both degrees, thus requiring only 54 credits total of advanced course work (not counting foundation courses), rather than the 36 and 30 credits normally required for the two degrees. Students in the combined degree program will follow the same schedule as regular M.B.A. students, including the two lockstep semesters. To get both degrees, students will take all foundation courses required for the M.B.A., unless waived, all nine core courses required for the M.B.A., and nine additional courses in the M.S. in Information Systems program, including INFO 610, INFO 620 and INFO 630. Students whose undergraduate degree is not in Information Systems may also be required to take additional undergraduate prerequisite courses before taking the graduate information systems courses, as determined by the program adviser. The INFO 661 course taken for the M.B.A. will substitute for INFO 640, normally required for the M.S. in Information Systems degree, and three of the additional information systems courses also will count toward the normally required three elective courses in the M.B.A. program.

One of the information systems courses must have substantial global, entrepreneurial and/or experiential components. The six information systems courses to be taken in addition to INFO 661, INFO 664, INFO 610, INFO 620 and INFO 630 must be approved by the program adviser, and would normally be selected to satisfy one of the M.S. in Information Systems tracks.
School of Business

Master of Arts in Economics

The Master of Arts in Economics is designed to enhance the students’ abilities to use economic modeling to conduct applied analytical and econometric research. Students in this program are expected to demonstrate competence over a rigorous and current core curriculum in microeconomic and macroeconomic theory and in econometrics.

Graduates of the program should be well qualified to conduct applied economic analysis in either a government or corporate research setting. The program also is an excellent preparation for entry into a doctoral program in economics or finance.

Students may elect a Master of Arts in Economics without specialization or may specialize in financial economics. The specialization in financial economics combines the theoretical and econometric foundation obtained in the core courses of the concentration in quantitative economics with an in-depth study of their application to financial markets.

The Master of Arts in Economics without specialization requires 30 semester hours of work, while the specialization in financial economics requires 33 semester hours. Both a thesis and a nonthesis option are available.

Admission criteria

Admission criteria include undergraduate performance, the Graduate Record Examination (GRE), intellectual capacity, experience and other indicators of the ability to pursue graduate study profitably. The GRE subject test in economics is not required. Applicants to the financial economics track may substitute the GMAT for the GRE. Applications should be completed at least eight weeks prior to the beginning of the semester or summer session desired.

Requirements for the Master of Arts in Economics without specialization

One course in each of the following subject areas is a prerequisite for the Master of Arts in Economics: intermediate macroeconomic theory, intermediate microeconomic theory, introductory econometrics and calculus. The student’s adviser will review the student’s economics and mathematical background to determine the extent to which the student has satisfied prerequisites. Required prerequisites may be taken after admission. The degree requires 30 semester hours of 600-level credit. Under the thesis option, the 30 hours must include eight core courses and one economics elective, and one business or economics elective. Under the nonthesis option, the 30 hours must include six core courses, two economics electives, and two business or economics electives.
Degree requirements with thesis

<table>
<thead>
<tr>
<th>Core area</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 604 Advanced Microeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 607 Advanced Macroeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 612 Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 614 Mathematical Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 641 Econometric Time Series Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 642 Panel and Nonlinear Methods in Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 798-799 Thesis in Economics</td>
<td>6</td>
</tr>
</tbody>
</table>

24

Approved economics elective                                                3
Approved elective in economics, business or other field                   3

30

Degree requirements without thesis

<table>
<thead>
<tr>
<th>Core area</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 604 Advanced Microeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 607 Advanced Macroeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 612 Econometrics</td>
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<td>ECON 614 Mathematical Economics</td>
<td>3</td>
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<tr>
<td>ECON 641 Econometric Time Series Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 642 Panel and Nonlinear Methods in Econometrics</td>
<td>3</td>
</tr>
</tbody>
</table>

18

Approved economics electives                                              6
Approved electives in economics, business or other field                  6

30

Requirements for Master of Arts in Economics with a specialization in financial economics

One course in each of the following subject areas is a prerequisite for the specialization in financial economics: intermediate macroeconomic theory, intermediate microeconomic theory, introductory econometrics, calculus and finance. The student’s adviser will review the student’s economics and mathematical background to determine the extent to which the student has satisfied the prerequisites. Required prerequisites may be taken after admission.

The specialization in financial economics requires 33 semester hours of 600-level courses. Under the thesis option, the 33 hours must include nine core courses and two restricted electives. Under the non-thesis option, the 33 hours must include seven core courses, three restricted electives and one general elective in economics, finance or other approved field.
### Degree requirements with thesis

<table>
<thead>
<tr>
<th>Core area</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 604 Advanced Microeconomic Theory</td>
<td>3</td>
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<tr>
<td>ECON 607 Advanced Macroeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 612 Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 614 Mathematical Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 641 Econometric Time Series Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 642 Panel and Nonlinear Methods in Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 798-799 Thesis in Economics</td>
<td>6</td>
</tr>
</tbody>
</table>

Total: 27 credits

### Restricted electives

<table>
<thead>
<tr>
<th>Two of the following three courses</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 623 Anomalies in Financial Economics</td>
<td></td>
</tr>
<tr>
<td>FIRE 635 Investments and Security Analysis</td>
<td></td>
</tr>
<tr>
<td>FIRE 650 Derivatives</td>
<td></td>
</tr>
</tbody>
</table>

Total: 33 credits

### Degree requirements without thesis

<table>
<thead>
<tr>
<th>Core area</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 604 Advanced Microeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 607 Advanced Macroeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 612 Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 614 Mathematical Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 617 Financial Markets</td>
<td>3</td>
</tr>
<tr>
<td>ECON 641 Econometric Time Series Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 642 Panel and Nonlinear Methods in Econometrics</td>
<td>3</td>
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</tbody>
</table>

Total: 21 credits

### Restricted electives

<table>
<thead>
<tr>
<th>Three of the following four courses</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 623 Anomalies in Financial Economics</td>
<td></td>
</tr>
<tr>
<td>FIRE 623 Financial Management</td>
<td></td>
</tr>
<tr>
<td>FIRE 635 Investments and Security Analysis</td>
<td></td>
</tr>
<tr>
<td>FIRE 650 Derivatives</td>
<td></td>
</tr>
</tbody>
</table>

Total: 30 credits

Approved elective in economics, finance or other field | 3 |

Total: 33 credits

Note: Electives are approved in consultation with the graduate adviser for the Master of Arts in Economics.
School of Business

Master of Science in Business

The Master of Science program provides in-depth knowledge of one business discipline and allows students to develop and build technical skills in their specific area of interest. It is frequently recommended for students with an undergraduate business degree. Concentrations are available in the following functional areas:

- Decision sciences
- Finance
- Global marketing management
- Human resource management and industrial relations (Note: Admission to the Master of Science in Business with a concentration in Human Resource Management and Industrial Relations has been suspended.)
- Real estate valuation

Requirements for the Master of Science in Business program

A course in college algebra is a prerequisite for some concentrations; a course in calculus is required for others. Some concentrations (e.g., real estate valuation) have additional undergraduate prerequisites as well. Some or all of these prerequisite courses may be waived for students who present satisfactory, equivalent preparation or may be taken after admission.

Each student in the program must complete a minimum of four 500-level foundation courses (12 credit hours) required for the M.B.A. degree. Foundation courses may be waived for students who present satisfactory, equivalent preparation at either the undergraduate or graduate level. Students who are required to take foundation courses may do so at the graduate level after admission. The foundation courses required will vary depending upon the student’s background, career interests and the chosen area of specialization. Applicants should consult with the area coordinators or department chairs or the director of graduate programs in business to determine the foundation courses required for a particular area. Each student in the program also must complete a minimum of 10 600-level advanced courses (30 credit hours), although up to two additional courses (six credit hours) may be required for some concentrations. A student, in consultation with a faculty adviser, selects a set of advanced courses to create a tailored and focused program of study. Applicants should consult with the area coordinators, department chairs, or the director of graduate programs in business to determine the departmental guidelines controlling the required courses and electives for a particular concentration.

For additional information, refer to the Web: [http://www.gsib.vcu.edu](http://www.gsib.vcu.edu).

Admission criteria for Master of Science
Admission criteria include undergraduate performance, GMAT scores, intellectual capacity, experience, and other indicators of the ability to pursue graduate study profitably. Deadlines are as follows:

<table>
<thead>
<tr>
<th>Season</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>Nov 1</td>
</tr>
<tr>
<td>Summer</td>
<td>Mar 1</td>
</tr>
<tr>
<td>Fall</td>
<td>Apr 1/early decision</td>
</tr>
<tr>
<td></td>
<td>Jun 1/final deadline</td>
</tr>
</tbody>
</table>

**Decision sciences**

This concentration provides students with both a conceptual understanding of quantitative methods used successfully in many business environments and skills in applying them. In addition to statistics, operations research and production/operations management courses, a restricted number of approved quantitative courses can be selected from the departments of Economics, Biostatistics or Mathematical Sciences.

**Foundation courses** (0 to 15 credit hours)

MGMT 524 Statistical Elements of Quantitative Management

And at least four of the courses listed below or provide proof of satisfactory equivalent preparation:

- ACCT 507 Fundamentals of Accounting
- FIRE 520 Financial Concepts of Management
- MGMT 540 Management Theory and Practice
- MRBL 570 Concepts and Issues in Marketing
- ECON 500 Concepts in Economics

**Core courses** (30 credit hours)

MGMT 645 Operations Research

MGMT 632 Statistical Analysis

And any three of the four courses below:

- MGMT 648 Managerial Decision Making
- MGMT 669 Forecasting Methods
- MGMT 675 Operations Management
- MGMT 677 Quality

And any five courses selected from below that meet the approval of the faculty adviser:

- A fourth course from the above list (MGMT 648, MGMT 669, MGMT 675 or MGMT 677)
- From the School of Business (other business courses may be selected that would fit with the student’s interests and career objectives):

  - ACCT 608 Managerial Accounting
  - ECON 610 Managerial Economics
  - ECON 612 Econometrics
  - ECON 614 Mathematical Economics
  - INFO 619 Computer Assisted Simulation
  - MGMT 642 Business Policy
  - MGMT 643 Applied Multivariate Methods
MGMT 697 Guided Study
MRBL 673 Marketing Research

From outside the School of Business:
BIOS 647 Survival Analysis
MATH 520 Game Theory and Linear Programming
MATH 523 Discrete Event Simulation
MATH 527-528 Mathematical Foundations of Operations Research
STAT 503 Introductions to Stochastic Processes
STAT 513-514 Mathematical Statistics
STAT 523 Nonparametric Statistical Methods
STAT 549 Statistical Quality Control
STAT 623 Discrete Multivariate Analysis

Note: Most of the courses above have prerequisites. It is always wise to check with the instructor before registering to ensure that the student’s preparation is sufficient for taking the course.

**Finance**

The finance concentration is designed to prepare students for financial decision-making positions in corporate, investment, financial and governmental institutions. Courses offered in finance include advanced financial management, investments and security analysis, funds management in financial institutions, international finance, and derivatives.

**Prerequisite**
Calculus (MGMT 212 or 500)

**Foundation courses** (0 to 12 credit hours, dependent on the number of courses waived or included as free electives.)
ACCT 507 Fundamentals of Accounting
ECON 500 Concepts in Economics
FIRE 520 Financial Concepts of Management
MGMT 524 Statistical Elements of Quantitative Management

**Core area** (15 credit hours)
FIRE 622 Financial Management of Financial Institutions
FIRE 623 Financial Management
FIRE 635 Investments and Security Analysis
FIRE 639 International Finance
FIRE 650 Derivatives

**Finance, insurance and real estate electives** (12 credit hours)
Students select four of the following courses:
FIRE 621 Cases in Financial Management
FIRE 625 Group Insurance and Pension Planning
FIRE 626 Risk Management
FIRE 628 Cases in Real Estate Valuation
FIRE 629 Real Estate Investment Analysis
FIRE 654 Short-term Financial Management
FIRE 657 Current Issues in Investments and Markets
FIRE 658 Real Estate Finance and Investments
FIRE 664 Current Issues in Corporate Finance
FIRE 691 Topics in Finance, Insurance and Real Estate
FIRE 693 Field Project in Finance, Insurance and Real Estate*
FIRE 697 Guided Study in Finance, Insurance and Real Estate

* FIRE 693 Field Project in Finance, Insurance and Real Estate is recommended for full-time students. The department will work closely with full-time students and prospective employers in order to achieve this goal.

A student may substitute a free elective for one of the FIRE electives with the approval of the director of the concentration in finance.

Free electives (9 credit hours)
Students may choose any three free electives approved by the director of the M.S. program in finance. Students are encouraged to select accounting, economics, math or statistics courses. Up to two foundation courses may be included as free electives, if they were not waived, as may additional courses included in the list of finance, insurance and real estate electives.

Global marketing management

The Master of Science in Business with a global marketing management concentration offers students the opportunity to concentrate their studies in international marketing and contemporary issues in marketing management while taking courses in other business disciplines that support the program’s focus on global business management. Students select foundation, core and/or elective courses in accounting, economics, finance, information systems or management to complement marketing courses in the program. Students interested in preparing for the increasingly global nature of business will be well suited for this unique Master of Science degree program. All degree candidates are strongly encouraged to participate in an intensive study program in a foreign language and/or a foreign study program.

Foundation courses (0 to 12 credit hours, depending upon how many courses are waived.)
MRBL 570 Concepts and Issues in Marketing
And any three of the following:
   ACCT 507 Fundamentals of Accounting
   ECON 500 Concepts in Economics
   FIRE 520 Financial Concepts of Management
   MGMT 524 Statistical Elements of Quantitative Management
   MRBL 530 Fundamentals of the Legal Environment of Business

Core area (18 credit hours)
MRBL 671 Marketing Management
And any five of the following:
   ACCT 606 International Accounting (prerequisite ACCT 507)
   ECON 609 Advanced International Economics (prerequisite ECON 500)
FIRE 639 International Finance (prerequisite FIRE 520)
MGMT 644 International Business Management
MRBL 656 International Marketing (prerequisite MRBL 570)
MRBL 657 International Marketing Planning Project (prerequisite MRBL 570 and 673)
MRBL 673 Marketing Research (prerequisite MRBL 570 and MGMT 524)

Marketing electives (six credit hours)
Any two of the following courses, all of which require MRBL 570 as prerequisite:
- MRBL 651 Direct Marketing Theory and Research
- MRBL 652 Database and Direct Marketing Strategy
- MRBL 653 Concepts and Issues in Direct Marketing Management
- MRBL 657 IMP Project (if not used in core)
- MRBL 659 Database Marketing
- MRBL 672 Concepts in Consumer Behavior
- MRBL 674 Service Quality Management

Restricted electives (six credit hours)
Any two of the following courses:
- ACCT 606 International Accounting
- ECON 609 Advanced International Economics (if not used in the core)
- FIRE 639 International Finance (if not used in the core)
- INFO 661 Management Information Systems
- MRBL 697 Guided Study in Business

Human resource management and industrial relations

Note: Admission to the Master of Science in Business with a concentration in Human Resource Management and Industrial Relations has been suspended.

The Master of Science in Business with a human resource management and industrial relations concentration is designed to provide students with an in-depth understanding of the field and its problems and opportunities. The curriculum focuses on the dynamics of an ever-changing field from both a local, national and international perspective. The ultimate objective of the program is to prepare students for a career in human resource management and industrial relations.

Foundation courses
(0 to 12 credit hours, depending upon how many courses are waived)
- ECON 500 Concepts in Economics
- MGMT 524 Statistical Elements of Quantitative Management
- MGMT 540 Management Theory and Practice
- MRBL 530 Fundamentals of the Legal Environment of Business

Core area
(30 credit hours)
- FIRE 625 Group Insurance and Pension Planning
ECON 631 Labor Market Theory and Analysis
MGMT 633 Issues in Labor Relations
MGMT 637 Seminar in Human Resource Management
MGMT 649 Compensations Policy and Administration
MGMT 680 Health, Safety and Security Administration
MGMT 682 Human Resource Staffing
MGMT 684 Issues in International Human Resource Management
MGMT 690 Business Research Seminar
MRBL 646 Advanced Labor and Employment Relations Law

Real estate valuation

The real estate valuation concentration is one of only five programs in the nation that satisfies the rigorous educational requirements of the Appraisal Institute’s MAI designation. Students can satisfy most of the Appraisal Institute’s education requirements by completing the concentration. This concentration emphasizes real estate valuation while providing comprehensive education in related disciplines so that graduates’ analytical skills and abilities to communicate with other professionals are greatly enhanced. Whenever possible, students will be placed in internships with MAIs.

Prerequisite courses
FIRE 425 Real Estate Appraisal
FIRE 431 Advanced Real Estate Appraisal
A course in calculus (MGMT 212 or MGMT 500)

Foundation courses (0 to 18 hours, dependent on the number of courses waived)
ACCT 507 Fundamentals of Accounting
ECON 500 Concepts in Economics
FIRE 520 Financial Concepts of Management
MGMT 524 Statistical Elements of Quantitative Management
MRBL 530 Fundamentals of the Legal Environment of Business
MRBL 570 Concepts and Issues in Marketing

Required courses (30 credit hours)
ECON 617 Financial Markets
FIRE 621 Cases in Financial Management
FIRE 627 Real Estate Development
FIRE 628 Using GIS in Real Estate Decisions
FIRE 629 Real Estate Investment Analysis
FIRE 638 Real Property Investment Law
FIRE 658 Real Estate Finance and Investments
FIRE 697 Guided Study – Real Estate
  FIRE 697 is a supervised research course that involves the preparation of a narrative income-property appraisal report
MGMT 632 Statistical Analysis
MRBL 673 Marketing Research
The Master of Science in Information Systems program is designed to prepare students for specialized roles in information systems. The program is intended to provide a graduate-level, technically oriented curriculum that focuses on the design and development of information systems to solve real-world problems. The department's curriculum is focused on the rapidly emerging area known as Enterprise Information Systems. Graduates of the program are expected to be able to take significant roles in planning, organizing, managing, designing, configuring and implementing EIS systems using state-of-the-art technologies within organizations. Additionally, M.S. in Information Systems students can apply to the M.B.A./M.S. in Information Systems dual degree program.

Students applying to the master’s program must show evidence of competence in selected prerequisite areas of information systems including: application programming, systems analysis and design, database, telecommunications, and hardware/software. Evidence of this competence may include formal course work, comparable training within a work environment, or significant, relevant and recent work experience in the field. Students enrolled as majors in the program who do not have formal background or equivalent training must take the appropriate undergraduate courses to satisfy the prerequisites prior to taking master's program courses. The required undergraduate courses are: INFO 300, INFO 350, INFO 360, INFO 361, INFO 370, INFO 464 and a course in calculus.

Students who do not have a business degree must complete a minimum of four 500-level foundation courses (12 credit hours). Foundation courses may be waived for students who present satisfactory, equivalent preparation at either the undergraduate or graduate level. Students who are required to take foundation courses may do so after admission. The foundation courses required will vary depending upon the student’s background, career interests and the chosen area of specialization. Students applying to the Master of Science in Information Systems program should consult with their master’s program adviser to determine the foundation courses required for a particular area.

The program consists of 30 graduate credit hours including: four core courses (12 credit hours) and six track courses (18 credit hours). Core graduate course are:

INFO 610 Analysis and Design of Database Systems
INFO 620 Data Communications
INFO 630 Information Engineering
INFO 640 Information Systems and Knowledge Management

In addition to the core courses, students must select an area of specialization. Three tracks are defined: Network/Infrastructure (N/I), E-business Systems Engineering (EBSE) and Information
Engineering (IE). Each track consists of required courses and two electives, to be taken in consultation with the student’s adviser and based upon the student’s area of interest, career goals and existing departmental and university areas of expertise.

**Network/Infrastructure track**
The N/I track prepares students for the technical aspects of network administration, systems administration and database administration.
INFO 622 Network Administration I
INFO 624 Network Administration II
INFO 626 Systems Performance
INFO 628 Database and Systems Administration
Two electives

**E-business Systems Engineering track**
The EBSE track prepares students to design and deploy e-business systems.
INFO 632 Business Process Engineering
INFO 654 E-business Interface Design
INFO 658 Electronic Commerce
INFO 659 E-commerce Systems Architecture Development
Two electives

**Information Engineering track**
The IE track is intended to train specialists who can function effectively as business consultants, project leaders, business analysts and application developers. Students gain the ability to participate in planning, organizing and managing enterprise information systems projects as well as to design, configure and implement business applications.
INFO 611 Data Reengineering
INFO 616 Data Warehousing
INFO 632 Business Process Engineering
INFO 634 Application Engineering
Two electives
The Master of Taxation program is designed 1) to offer an opportunity for existing tax professionals to update and expand existing tax knowledge, and 2) to prepare students for entry level positions in the field of taxation. The program includes a comprehensive study of tax laws and regulations, administrative practice and procedure, and tax research fundamentals. It is designed to develop both technical knowledge and conceptual understanding within the field of taxation. Ethical considerations are stressed within the framework of individual courses.

Admission criteria

Applicants may be admitted under either a professional or an academic track. The professional track is designed for current tax professionals who want to enhance existing skills. Admission under the professional track requires a minimum undergraduate GPA of 3.0 (on a 4.0 scale); C.P.A., C.M.A. or J.D. designation; a minimum of two years relevant work experience, which should include independent tax research and supervisory experience; letters of recommendation; and a personal interview. The academic track is designed primarily for students seeking entry into the tax field. Admission under the academic track is based on traditional academic indicators designed to reflect an individual’s ability to complete graduate study and include the undergraduate record, GMAT score, letters of recommendation and a personal interview (preferred). Once admitted to the program, all students must satisfy the same requirements for award of the Master of Taxation degree. Applications should be completed by:

- Fall: Jul 15
- Spring: Nov 15
- Summer: Mar 15

Requirements for the Master of Taxation program

Three semester hours of tax accounting and a course in college algebra are prerequisites for the Master of Taxation. Prerequisites need not be completed prior to completing the application to the program.

The program consists of one prerequisite course, three foundation courses and 10 courses distributed over core courses, restricted electives and individual electives. The foundation courses may be waived for students who have taken the equivalent material at the undergraduate level or may be taken at the graduate level after the student has been admitted. A minimum of 30 hours of advanced graduate credit at the 600 level or higher will be required of all students.
Degree requirements – Master of Taxation

<table>
<thead>
<tr>
<th>Credits</th>
<th>Course and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Prerequisite course ACCT 405 Tax Accounting</td>
</tr>
<tr>
<td>3</td>
<td>Foundation courses:\n\nACCT 507 Fundamentals of Accounting 3\nMRBL 530 Fundamentals of the Legal Environment of Business 3\nOne course from the following list:\n\n- ECON 500 Concepts in Economics 3\n- FIRE 520 Concepts of Financial Management 3\n- MGMT 540 Management Theory and Practice 3</td>
</tr>
<tr>
<td>15</td>
<td>Advanced courses Core area:\n\nACCT 680 Tax Research 3\nACCT 681 Tax Administration 3\nACCT 682 Corporate Taxation 3\nACCT 685 Taxation of Property Transactions 3\nACCT 688 Estate and Gift Taxation 3</td>
</tr>
<tr>
<td>9</td>
<td>Taxation electives Three courses selected from the following list:\n\n- ACCT 609 State and Local Taxation 3\n- ACCT 679 International Taxation 3\n- ACCT 683 Taxation of Reorganizations 3\n- ACCT 684 Partnership Taxation 3\n- ACCT 686 Taxation of Pension/Deferred Compensation 3\n- ACCT 687 Fiduciary Income Taxation 3\n- ACCT 689 Estate Planning 3</td>
</tr>
<tr>
<td>6</td>
<td>Approved electives</td>
</tr>
</tbody>
</table>

The approved electives may include:

- Any 600-level taxation course not taken in the advanced courses or selected as a tax elective.
- Any 600-level accounting course except ACCT 608 and 678.
- Any approved 600-level advanced business or economics course.

* These foundation courses may not be included in the 30 semester credits of advanced work required for the Master of Taxation.
Ph.D. in Business

The Ph.D. in Business program is designed specifically for individuals intending to fill positions at institutions that require a balance of scholarly training, teaching and practical application of the appropriate field of study. With its small size — the program has less than 40 students — it allows for extensive one-to-one interaction between students and faculty. Three areas of study are offered: accounting, information systems and management. Please note that admissions to the management/organizational behavior major in the Ph.D. in Business have been suspended. New students are not being admitted to the organizational behavior major or minor in the Ph.D. in Business program.

A basic tenet of the Ph.D. in Business program is that the classic trilogy of research, teaching and service typically invoked in university mission statements is synergistic. The program strives to develop graduates who share this perspective and aspire to well-rounded individual roles within universities, colleges and other learning organizations. For this reason, the program provides instruction in both research and teaching.

Instruction in basic and applied research is the cornerstone of the program. To fulfill the requirements for the degree, students must demonstrate successful completion of prerequisite and advanced courses, of comprehensive examinations in major and minor areas of study, and completion and defense of a dissertation. The advanced courses provide coverage in basic theories, methodologies and techniques needed to conduct research. The dissertation demonstrates the student’s competence in conducting independent research.

Enhancement of teaching skills is emphasized in the program. It provides students with mentoring and teaching experience. Formal instruction designed to augment student teaching skills is also required. Mentoring involves teaming a student with a faculty member with the goal of augmenting student self-awareness and self-confidence in the classroom. Classroom experience is required to insure that the Ph.D. graduate enters the job market with certifiable teaching experience. The formal courses are designed to provide substantive instruction on teaching the adult learner.

A third aspect of the Ph.D. program is its emphasis on practical application in the area of study for students concentrating in accounting and information systems. In accounting, for example, emphasis is placed on projects based on real-world experience, and students are encouraged to develop papers around topics that address practical application of accounting concepts. In information systems, students usually work on projects brought in to the Information Systems Research Institute (ISRI). These projects focus on user applications and emphasize solutions to specific requirements.

Admission requirements
Admission will be restricted to those who are considered by the School of Business Ph.D. Committee to possess academic and professional qualifications necessary to succeed in the program and to make a contribution to the profession. Criteria considered will include, among other things, performance at the bachelor’s and graduate levels, GMAT scores, letters of recommendation, as well as both academic and business experience. Preference will be given to students who have fulfilled the general business prerequisites of the program. An interview is highly recommended. Applicants should contact the Graduate Studies in Business Office or the Ph.D. area coordinator for the applicant’s intended major to schedule an interview. Admission to the doctoral program is highly competitive; consequently, qualified applicants may be denied admission because of insufficient space and resources. Applications should be completed by Jan. 1 for fall admission.

Prerequisite courses

Students are required to have a broad and in-depth exposure to the business disciplines prior to beginning their doctoral studies. Therefore, students are required to have completed at least one course at the master’s level in each of the following areas: accounting, information systems, organizational behavior, quantitative management, financial management, marketing and economics. This requirement may be waived by the director of graduate programs in business for applicants possessing an M.B.A. degree from an institution accredited by the The Association to Advance Collegiate Schools of Business (AACSB). It also may be waived for applicants possessing a master’s degree in a business discipline from an AACSB-accredited institution when the applicant has also completed the equivalent of the foundation courses required in VCU’s M.B.A. program and a course in business policy. Students with deficiencies in these areas may be admitted and may matriculate; however, any deficiencies must be completed before beginning courses required in the doctoral program.

Students are required to have completed a minimum of one course that covers intermediate algebra and calculus prior to beginning the doctoral program. In addition, students may be required to take additional courses to cover any other deficiencies. Qualifying exams will be used, when appropriate, to determine the extent of the student’s competency. Applicants should discuss the extent to which their background is sufficient with the Ph.D. area coordinator for the applicant’s intended major.

Students majoring in organizational behavior must satisfy these specific prerequisites. The prerequisite context knowledge may be satisfied by previous completion of five courses (three credits each) at the undergraduate or graduate level from at least three of the following eight areas: operations management; statistics or quantitative methods; psychology, sociology or organizational behavior; finance; marketing; accounting; economics; information systems.

Degree requirements for the Ph.D.

Each student must select a major in one of the following specialties:

- Accounting
- Information systems
Additionally, students must select one different minor from the specialties listed above or the following:

- Decision sciences
- Economics
- Finance
- Human resource management and industrial relations
- International business
- Marketing
- An approved field outside the School of Business in a school or a department that offers a doctoral program. This option must have the approval of the Ph.D. committee and the director of graduate programs.

The following courses beyond those required at the master’s level will be required for the Ph.D. degree.

**Accounting and information systems majors**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRAD 602 Seminar in College Teaching</td>
<td>1</td>
</tr>
<tr>
<td>Research tools determined by each area</td>
<td>12</td>
</tr>
<tr>
<td>Six or seven courses in the major area</td>
<td>18-21</td>
</tr>
<tr>
<td>Three or four courses (9 to 12 semester credits) in the minor area as determined by the school/department offering the minor. Minors in the School of Business normally require four courses.</td>
<td>9-12</td>
</tr>
<tr>
<td>Dissertation research (minimum of 12 credits)</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>52-58</strong></td>
</tr>
</tbody>
</table>

**Organizational behavior majors**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note: Admission currently suspended.</td>
<td></td>
</tr>
<tr>
<td>Quantitative techniques</td>
<td>12</td>
</tr>
<tr>
<td>Major area</td>
<td></td>
</tr>
<tr>
<td>Research and teaching skills component</td>
<td></td>
</tr>
<tr>
<td>Teaching skills (3)</td>
<td></td>
</tr>
<tr>
<td>Research methods (6)</td>
<td></td>
</tr>
<tr>
<td>Theories and models component</td>
<td></td>
</tr>
<tr>
<td>Seminars from Department of Management (9)</td>
<td></td>
</tr>
<tr>
<td>Seminar from outside Department of Management (3)</td>
<td></td>
</tr>
<tr>
<td>Minor area</td>
<td>9</td>
</tr>
<tr>
<td>Dissertation research</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>54</strong></td>
</tr>
</tbody>
</table>

A minimum of 12 semester credits in the major area and six credits in each of the minor areas must be completed at VCU after entry into the Ph.D. programs. Regular participation in a luncheon seminar series also is expected of Ph.D. students.
Advising and evaluation

Each student will be assigned an adviser. The student’s original program and any subsequent changes must be approved by the adviser and the director of graduate programs in business. A file will be maintained on all students in the Graduate Studies in Business Office where their progress will be monitored and coordinated. 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.

Ph.D. in Business Handbook

The School of Business publishes a handbook that provides a comprehensive overview of the policies and procedures involved in obtaining a Ph.D. in business at VCU. All procedures associated with the Ph.D. program are covered — from admission to graduation — with special emphasis placed on the dissertation process. Detailed information about financial support, comprehensive examinations, and dissertation proposals and defenses is included in the handbook.

General requirements for the Ph.D.

In addition to the general academic regulations stated in the Graduate Studies at VCU section of this bulletin and the regulations listed earlier in this section for all students in graduate programs administered by the School of Business, Ph.D. students in the school are subject to the following requirements:

1. Students who fall below a 3.0 GPA will have one semester to make up that deficiency.
2. Students must register each semester (summer sessions excluded) for continuation in the program. Students who fail to register each semester will be dropped automatically from the program and must reapply for reinstatement.
3. The maximum time to complete all the requirements for the degree is seven calendar years from the date of entry into the program. The maximum time to complete the course work, pass the comprehensive examination and present an acceptable dissertation proposal is five years from the date of entry.
4. Doctoral study involves a devotion to independent study outside the classroom and interaction with the faculty and other students. During the period of advanced course work, students must complete at least nine credits each semester for a minimum of two consecutive semesters, one of which may be a summer session.
5. A maximum of nine semester credits may be transferred from another AACSB-accredited university and applied toward the Ph.D. course requirements. All transfer work must be at the “A” or “B” grade level. Transfer credit shall not be older than seven years at the time the Ph.D. degree is awarded. Transfer credit is given at the discretion of the director of graduate programs in business after consultation with appropriate departmental or faculty representatives.
Post-baccalaureate Graduate Certificate in Real Estate and Land Development

The Graduate Certificate in Real Estate and Land Development is designed for professionals who seek an opportunity for advanced study in real estate and are more interested in the focused knowledge obtainable than receipt of a graduate degree. The certificate provides students the ability to advance their careers while receiving recognition for their academic accomplishment in the form of a graduate certificate. Many working professionals, especially those with undergraduate majors in liberal arts, will find this program attractive since they can concentrate their energies on a tightly focused curriculum without enrolling in a large number of prerequisite courses. The graduate certificate may be completed by taking both on-campus and internet-based courses.

Admission criteria

Applicants must have an earned baccalaureate degree or its equivalent from an accredited college or university. Other admission requirements include (1) proficiency in using spreadsheet computer software demonstrated either by examination or completion of appropriate course work and (2) minimum of 2.7 GPA at the undergraduate level. A minimum of five years of business experience is preferred. Students are expected to have completed FIRE 431 Advanced Real Estate Appraisal or its equivalent prior to beginning graduate course work.

Certificate requirements

In order to be eligible for receiving the certificate, a student must maintain an overall GPA of 3.0. Eighteen credit hours beyond the bachelor's degree is required for completion of this graduate certificate program. A maximum of one three-hour course taken at another AACSB-accredited institution may be transferred into this program. Students interested in later applying for admission into either the Master of Business Administration program with concentration in real estate and urban land development or the Master of Science in Business with concentration in real estate valuation must do so through a separate application process. Admission is dependent on the applicant having achieved a 3.0 GPA in the graduate certificate and a satisfactory score on the GMAT examination.

Required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE 627 Real Estate Development</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 629 Real Estate Investment Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 638 Real Property Investment Law</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 658 Real Estate Finance and Investments</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 628 Using GIS in Real Estate Decisions</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus one of the following courses:

3

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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 and Lyons 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, periodontics and prosthodontics are awarded the Master of Science degree.

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 who are competent 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.

Philips Institute of Oral and Craniofacial Molecular Biology

Francis L. Macrina
Director, The Philips Institute, and Edward Myers Professor of Oral and Craniofacial Molecular Biology and Microbiology and Immunology

The mission of the Philips Institute of Oral and Craniofacial Molecular Biology is to serve the university and the commonwealth of Virginia as a center of educational and research excellence focused on infectious, neoplastic and genetic diseases of the oral cavity, head and neck.

Graduate course work in the medical humanities

Graduate students in the health professions or in health-related fields may be interested in taking ORPT 510 Medical Humanities. This course is sponsored through the School of Dentistry and is open to all graduate students in the health professions and health-related fields. The two-credit course is offered each fall one day per week from 6 to 8 p.m. Questions may be directed to Louis M. Abbey, D.M.D. at (804) 828-1778 or via e-mail: labbey@vcu.edu. The Medical Humanities course syllabus is available online: http://www.vcu.edu/dentistry/opath.

The Medical Humanities course explores and interprets literature (short stories, poetry and essays). The class discusses myth and moral and ethical issues in relation to the literature assigned. Students are encouraged to keep and share a reading journal in which they reflect on their personal stories and those of the characters about whom they read. Class discussion stimulates an understanding between the health professional’s daily life and the lives and situations of the characters in the readings. Medical humanities establishes useful connections between the life of a health professional and reflective intellectual experience. Students taking the course for credit will be expected to write a creative work and/or a paper.
School of Dentistry

Master of Science in Dentistry

The master’s degree program is offered concurrently with the advanced dental education programs in endodontics, orthodontics, pediatric dentistry, periodontics and prosthodontics. Students completing these programs are awarded a specialty certificate and a Master of Science degree. The certificate and degree programs must be completed concurrently.

For more information on these advanced dental education programs see the School of Dentistry Professional Programs section of this bulletin.

Requirements for admission

Students must first be accepted into one of the advanced dental education programs in endodontics, orthodontics, pediatric dentistry, periodontics or prosthodontics. Once accepted, students are automatically enrolled in the master’s degree program in the Graduate School. A separate application and fee are required for admission to the Graduate School.

Requirements for graduate degree

1. The student must complete all course work for the particular advanced dental education program.
2. The student must initiate, develop and complete an original scientific study.
3. The student must complete a thesis according to the Graduate School’s guidelines.
4. The student must pass the final examination of the thesis.
5. The student must maintain a cumulative GPA of 3.0.

Thesis adviser and committee

Students receive guidance and counsel from the director of their program. The program director holds primary responsibility for monitoring the development of the student in the program and providing appropriate guidance and counsel essential to the scholarly development of the student.

A thesis advisory committee, appointed shortly after the student enrolls, serves as both an examining and consultative body, functioning to assist the student with development of their research.

Each student shall have a thesis adviser and advisory committee. In many cases, the program director also will serve as the thesis adviser.

The student’s thesis adviser shall be appointed by the program director. The adviser must be a member of the graduate faculty. Appointment should be made by the beginning of the spring
semester of the first year.

The adviser shall, with the student’s advisory committee, have responsibility for guiding the student’s research. The adviser will identify members of the faculty to comprise the advisory committee. The adviser will serve as the chair of the committee. The adviser will supervise the student’s research work and thesis preparation and be one of the examiners of the thesis.

The student’s advisory committee shall be appointed no later than the midpoint of the spring semester of the first year. Exceptions to this rule must be approved by the program director and thesis adviser. The committee shall consist of a minimum of three members as follows: the student’s thesis adviser; two members from the graduate faculty, one of which must be from the department/program. Adjunct faculty can be appointed to the graduate faculty for the purpose of serving on an individual student’s advisory committee.

The advisory committee functions as an advisory body to ensure that timely progress toward completion of the thesis is being achieved. It is the student’s responsibility to stay in contact and meet regularly with the committee. The advisory committee serves as a scientific consultative body and conducts the final examination of the thesis work.
School of Dentistry

Doctor of Dental Surgery

Admission requirements

A minimum of 90 semester hours (or equivalent) in an accredited college or university is required and must be documented. Most acceptances have a bachelor’s degree and/or four years of college. Required courses are general biology, general chemistry, organic chemistry, physics and English. Laboratory experiences are required for those courses where applicable. Biology courses should emphasize zoology rather than botany. Courses in biochemistry, general microbiology or bacteriology, animal physiology, immunology, histology, genetics, embryology, the behavioral sciences, and courses involving psychomotor skills are strongly recommended.

Academic credits presented by an applicant must be acceptable for credit toward a degree in the institution in which the courses are taken. Individuals interested in pursuing a career in dentistry should schedule an appointment in the Office of Admissions for individual guidance.

In order to successfully complete the dental curriculum at VCU, students must meet non-academic criteria for motor, sensory and observation, communication, cognitive and behavioral abilities in the document Technical Standards for Dental Education Programs for VCU School of Dentistry. Accordingly, applicants may be required to prove their proficiency in American English via standardized tests and interviews. An applicant may consider the option of postponing matriculation until such time that he/she can meet these requirements.

Participation in the Dental Admission Test (DAT) of the American Dental Association is required. It is recommended that this test be taken the year before the intended matriculation year. Applicants are encouraged to take the examination more than one time, and the best set of scores is used as the official set. Information about the Dental Aptitude Test can be obtained from: a) your pre-health advising office of your undergraduate school, b) VCU, School of Dentistry Office of Admissions or c) the American Dental Association, Department of Testing Web site: http://www.ada.org/prof/ed/testing.

Selection factors

VCU is a state-supported, public university and gives admission preference to state residents. All applicants are evaluated by uniform criteria without regard to age, race, color, national origin, gender, religion, sexual orientation, veteran’s status, political affiliation or disability. Students are accepted by the Admissions Committee on the basis of excellence of predental education, DAT scores, recommendations, experiences in dentistry and results of personal interviews with members of the committee. The interview process is standardized and designed to determine motivation, knowledge of and interest in the dental profession, and to afford the applicant an opportunity to provide additional information pertaining to his/her application. Selection occurs on a rolling admissions basis, and once the class is complete, an alternate list is
created. Members of minority groups underrepresented in dentistry are especially encouraged to apply. Each year a certain number of students who are not accepted into the freshman class are invited to take selected courses with this class. Their performance in these courses plays a vital role in their being considered for the following year’s admissions process.

**Application procedures**

The School of Dentistry participates in the American Association of Dental Schools Application Service (AADSAS). All applicants are required to submit credentials through this service. Re-applicants must also reapply through the application service. Application forms can be obtained from AADSAS, 1625 Massachusetts Ave. N.W., Suite 101, Washington, D.C. 20036 (e-mail to aadsas.appl@adea.org or call 202-667-1887), predental advisers in colleges and universities, and the Office of Admissions, School of Dentistry, Virginia Commonwealth University, P.O. Box 980566, Richmond, VA 23298-0566.

Application to the School of Dentistry can be made through AADSAS on or after May 1 and must be received by AADSAS no later than Nov. 1 of the year preceding intended matriculation.

AADSAS compiles academic records and other pertinent information and forwards these with the application to the School of Dentistry. Qualified applicants are then requested to submit supplemental information, such as the VCU supplemental application. The application fee is $70.

Applicants will be notified of decisions according to guidelines established by the American Association of Dental Schools. The first acceptances are sent out on Dec. 1, and a $200 deposit (credited to tuition) is required by Jan. 15. After Feb. 1, the deposit must be received within two weeks following notification of acceptance. A second deposit of $100 credited to tuition is due on May 1. Both deposits are nonrefundable.

A letter of acceptance offers the candidate a position in the class entering for the session cited. Receipt by the Office of Admissions of the initial $200 nonrefundable tuition deposit within the prescribed period reserves the position in the class. Failure to reserve a position results in that position being offered to another candidate. The second $100 nonrefundable tuition deposit initiates active administrative processing of matriculation into the first-year class. Failure to send this deposit results in loss of position, and the position is then offered to another candidate. The act of matriculation also implies a willingness on the part of the student to comply with university rules and regulations, to take an interest in maintaining the ideals of the institution, and to conduct himself/herself in a manner befitting a member of the dental profession.

**Admission with advanced standing**

The School of Dentistry will consider applicants for admission with advanced standing on an individual basis depending upon positions available and qualifications of the applicant. Pre-admission evaluation of skills and knowledge by performance testing is required prior to admission consideration.

**Financial assistance**

A general description of financial aid based on demonstrated need is contained in the
Professional Studies at VCU chapter of this bulletin. Financial need-based aid programs available to dental students include Health Professions Student Loans, Loans for Disadvantaged Students, Virginia Rural Dental Scholarship Program, and federal educational loans. Further information may be obtained from the offices of Admissions, Financial Aid and Student Affairs of the School of Dentistry.

**Honors and awards**

The School of Dentistry presents numerous awards, honors and scholarships to students during the academic year. These awards are presented during special school events, including graduation, Student Clinic Day and the Senior Gala. Students who excel in scholarship and leadership also may be eligible for membership in university or school honor societies. In addition, students who meet established criteria may be eligible for scholarships or election to membership in organizations related to dentistry.

Omicron Kappa Upsilon is the national honorary dental society. Each year the society selects those students who, in addition to scholarship, have demonstrated exemplary traits of character and potential qualities of future professional growth and attainments.

Phi Kappa Phi is a national honor society that recognizes and encourages superior scholarship. It accepts members from applied and professional fields of study, as well as from letters, arts, sciences and humanities. The VCU chapter was installed in 1977.

Alpha Omega Scholarship Award is presented to the graduating student who has attained the highest scholastic rating for his/her four years of dental study.

Harry Lyons Scholarship Award is awarded to the graduating senior dental student who has attained the highest grade-point average for his/her four years of dental school.

A. D. Williams Foundation Award is an annual stipend made to a student in each class who demonstrates, by virtue of high scholastic attainment and professional performance, unusual promise and ability. Character, motivation, intellectual curiosity and realization of the opportunities for intellectual development will be considered in the award, which is made at the end of the academic year.

O. M. Clough Award is awarded to a graduating senior dental student for outstanding achievement in restorative dentistry.

William B. Fitzhugh Scholarship Award is awarded to an incoming dental student who has demonstrated financial need, preference being given to students who have demonstrated athletic abilities at their undergraduate institution.

R. Ashton Gay and Henry F. Vaughan Scholarship is awarded to a student who is a Virginia resident at the VCU School of Dentistry, demonstrates academic excellence and leadership during the D-1 year, and has demonstrable need of financial assistance at the beginning of the D-2 year.
Edmond T. Glenn Award is awarded on the basis of financial need to a student ranked in the upper half of the class at the end of the D-3 year and who has been involved in school/class activities.

International College of Dentists Award is presented to the graduating dental student who has shown the most professional growth and development during his/her years of dental study.

Pierre Fauchard Academy presents an award to the graduating dental student who has exhibited leadership qualities and through his/her accomplishments has demonstrated dedication to the advancement of dental literature.

The Richmond Dental Study Club Memorial Endowment Scholarship is awarded annually to a D-3 (junior) dental student based on his/her having a GPA in the top 25 percent of the class and demonstrating exceptional leadership and participation in school and/or community extracurricular activities at the end of the D-2 (sophomore) year.

Alexander Kaufman Award is awarded to a junior dental student based on class leadership and financial need.

P. B. Miller Award goes to the dental student judged by faculty as having demonstrated excellent understanding of the relationship between restorative dentistry and periodontics.

Robert M. Saunders Scholarship is awarded to a junior or senior Virginia resident predoctoral dental student with excellent academic credentials.

**Curriculum leading to the D.D.S. degree**

The curriculum in the dental school is organized into a competency-based, four-year program leading to the doctor of dental surgery (D.D.S.) degree. The academic year begins in July and extends through June. The program emphasizes study in three broad areas: biomedical sciences, clinical sciences and behavioral sciences.

The biomedical sciences include the in-depth study of human anatomy, biochemistry, genetics, material science, microbiology, pathology, pharmacology and physiology.

The clinical sciences prepare the student for the actual practice of dentistry and provide exposure to the various specialties in dentistry.

The behavioral sciences cover such topics as dental health needs, the system of health care delivery, practice management, professional ethics and behavioral factors.

Laboratory and clinical experiences are offered throughout the four years to develop the skills and judgment vital to the practice of general dentistry.

In general, courses offered as part of the curriculum in dentistry are not available to other students in the university. Exceptions may be granted by the dean of the School of Dentistry to students enrolled in graduate degree programs upon written request of the department chair in which the student is seeking a degree.
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<th>Course Description</th>
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<td>GENP 512 Operative Dentistry</td>
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<td>MICR 513 Infection and Immunity in Dentistry</td>
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**Junior, second semester**

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<td>GENP 741</td>
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<td>GENP 743</td>
<td>General Practice Restorative Unit *</td>
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<tr>
<td>ORSG 749</td>
<td>Oral Surgery/Urgent Care Clinic *</td>
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Academic Performance Evaluation

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 that courses first convene, the criteria to be used in student assessment and the standards by which they will be judged.

The VCU School of Dentistry Guidelines for the Evaluation of Student Performance and Academic Status are distributed to all students at the beginning of their study. They are available upon request from the Office of Academic Affairs, School of Dentistry.
For every professional person who serves the health sciences, education must be a lifetime commitment. Graduation from dental school is the beginning of a lifelong educational experience for the serious, conscientious student of dentistry. Regardless of how well prepared a health professional may be at the time of graduation, the adequate knowledge of yesterday is often insufficient information for today and tomorrow. With the rapid advancements made in dental technology and techniques, the professional must constantly seek new knowledge if the health care provider is to improve the health care given to patients.

Although the majority of continuing education courses are presented at the School of Dentistry, some are offered in other locations. The courses, which vary in length from one to four days, are scheduled throughout the year and consist of a variety of instructional methods from didactic to hands-on participation in clinical programs.

The instructional staff is comprised of faculty from the VCU School of Dentistry, guest lecturers from other dental schools, and members of the dental profession and related professions from the United States and other countries.

Advanced Dental Education programs

The School of Dentistry provides advanced dental education programs in the areas of endodontics, oral and maxillofacial surgery, orthodontics, pediatric dentistry, periodontics, prosthodontics, and advanced education in general dentistry (AEGD). Satisfactory completion of the program leads to the award of a certificate of training and certifies eligibility for examination by the appropriate specialty board. All programs are accredited by the Commission on Dental Accreditation of the American Dental Association. A program also is offered for advanced education in anesthesiology for dentistry. Those enrolled in the advanced education programs are full-time resident trainees, considered to be the equivalent of full-time students. Under special circumstances, trainees may be accepted into some programs on a part-time basis.

Students enrolling in endodontics, orthodontics, pediatric dentistry, periodontics and prosthodontics also are awarded a Master of Science degree upon completion of the requirements for the certificate and successful defense of a thesis. The certificate program and Master of Science degree must be completed concurrently. See the School of Dentistry Graduate Program for more information on the Master of Science degree program.

Applications for admission should be directed to the director of the appropriate program, School of Dentistry, Virginia Commonwealth University, P.O. Box 980566, Richmond, VA 23298-0566.
Successful completion of Part II of the National Board Dental Examination is required prior to admittance to the program.

**Advanced Education in General Dentistry**

**Debra R. Haselton**  
Associate Professor and Program Director

The purpose of this 12-month advanced education residency program is to provide advanced education and clinical experience to prepare dental school graduates for a career in the practice of comprehensive, general dentistry. This program has a strong emphasis on treatment planning, experience with new technology, developing skills in aesthetic dentistry and restoration of implants. Graduates of this program will have attained added competency and confidence in all areas of dental care, practice management and professional responsibility. Further, this program provides residents with meaningful experiences in the delivery of dental care to diverse populations and people at high risk for dental disease. A strong affiliation exists between the School of Dentistry and the statewide Virginia Area Health Education Center (AHEC), whose mission is to increase primary health care in underserved areas. The AEGD program works in concert with AHEC to deliver dental care and recruit/train minority health care providers from health professional shortage areas.

The School of Dentistry is committed to advanced dental education. The residents will receive hands-on experience with diagnostic and therapeutic care of special patient populations in addition to extensive training in the art and science of general dentistry. AEGD residents may be required to participate in off-site clinical experiences outside the city of Richmond, Va. Funds will be provided for travel and lodging when required.

**Eligibility and selection**

Dentists with the following qualifications are eligible to apply for the AEGD program: Dental graduates from institutions in the United States accredited by the Commission on Dental Accreditation of the American Dental Association and who have passed Part I of the National Board Examination.

Selection criteria include: didactic and clinical achievements, extramural experience, interpersonal skills and a demonstrated commitment to pursue a career in general dentistry. Every effort is made to recruit qualified applications from minority dentists and dentists from health professional shortage areas or dentists who profess a desire to serve in these areas. A selection committee consisting of the program director, the assistant dean for admissions, members from specialty areas, former residents and current residents will screen all applications. Using the above-mentioned selection criteria, the most promising applicants will be invited for personal interviews. Trainees and alternates will be selected. This program participates in the Postdoctoral Application Support Service Program and the Postdoctoral Dental Matching Program.

Telephone (804) 828-3601; fax (804) 828-3159; e-mail cbrooks@vcu.edu.

**Endodontics**
Frederick R. Liewehr
Professor and Department Chair, Endodontics

The Advanced Specialty Education Program in Endodontics offers the student a comprehensive 24-month course of study in clinical, didactic and research endodontics. The program is designed to educate qualified individuals to pursue careers as educators, researchers and practicing clinicians, and meets the educational requirements for limitation of practice to the specialty of endodontics and examination by the American Board of Endodontics. The program is composed of several interrelated phases. The first phase consists of lecture courses that provide the student with a firm biological basis for patient care. The second phase consists of lectures, seminars and clinical training designed to produce clinical mastery of endodontics. The third phase is research experience gained through completion of an individual research project and master’s thesis.

Students completing the program earn a specialty certificate in endodontics and a Master of Science degree. Students must complete the requirements for the master’s degree prior to being awarded the specialty certificate.

The program conforms to the Standards for Advanced Specialty Education in Endodontics and carries a full approval status from the Commission on Dental Accreditation of the American Dental Association.

Oral and Maxillofacial Surgery

Robert A. Strauss
Professor and Program Director

The oral and maxillofacial surgery program is designed to provide extensive didactic and clinical experience in all aspects of the specialty. Those who complete training satisfactorily fulfill the prerequisites for examination and certification by the American Board of Oral and Maxillofacial Surgery.

The didactic portion of the program includes formal courses in oral pathology, anatomy and physical diagnosis, as well as numerous weekly conferences and seminars. Clinical rotations on oral pathology, anesthesia, medicine, surgical oncology, neurosurgery, cardiology, general surgery, emergency room and the trauma services are used to supplement the trainee’s surgical experience. Throughout the program there is a constant correlation of the clinical experience with the biomedical sciences.

Through the multiple clinical and didactic facilities of the VCU Medical Center complex, the McGuire Veterans Affairs Medical Center, and St. Mary’s Hospital, there is ample material for education in the latest oral and maxillofacial surgical techniques. The oral and maxillofacial surgery service is responsible for diagnosis and management of diseases and injuries related to the oral and facial region. Trainees are involved in all aspects of treatment including simple and complicated oral surgery, anesthesia and pain control, oral and maxillofacial trauma, preprosthetic surgery, orthognathic surgery, head and neck pathology, oral and maxillofacial reconstruction, temporomandibular joint surgery, laser surgery, cosmetic facial surgery, and microneural and microvascular surgery. During the four years, the trainee assumes ever-
increasing responsibilities as time and abilities dictate.

Upon satisfactory completion of the four-year residency, the trainee may earn the Doctor of Medicine degree from the School of Medicine by enrolling in the second and third years of that curriculum.

**Orthodontics**

**Steven J. Lindauer**  
Professor and Department Chair, Orthodontics

The Department of Orthodontics at VCU’s MCV Campus offers a 24-month advanced education Master of Science program. The program teaches state-of-the-art clinical care in an environment modeled after private orthodontic practice. The curriculum is composed of seminars and small-group instruction with emphasis on critical thinking and problem solving. Contemporary concepts of orthodontic treatment are reviewed for substantive and scientific content. Also included are regularly scheduled orthognathic surgery conferences and seminars with other dental and medical specialists.

The postgraduate program is designed to develop skilled practitioners who are prepared to grow with the future and manage busy orthodontic practices. The goal is not only to familiarize future orthodontists with contemporary techniques but also to teach them how to interpret cutting-edge scientific information and use it to approach clinical challenges logically and practically. Clinical experience consists of a wide variety of orthodontic patients, including complex cases requiring orthognathic surgery and patients with facial clefts and other craniofacial abnormalities. An original research experience is an integral part of the program, with each project intended to produce results suitable for publication in a nationally circulated orthodontic journal. The successful completion of a research project is a requirement of the program. All senior residents present their research at the Virginia Association of Orthodontists meeting. The program qualifies students to take the written portion of the American Board of Orthodontics examination in the senior year. Residents are required to take the written portion of the American Board of Orthodontics examination prior to graduation, and are encouraged to continue and complete the board certification process. This exam is given prior to the American Association of Orthodontists meeting.

Students completing the program earn a specialty certificate in orthodontics and Master of Science degree. Students must complete the requirements for the master’s degree prior to being awarded the specialty certificate.

The program is accredited by the Commission on Dental Accreditation of the American Dental Association.

**Pediatric Dentistry**

**Michael D. Webb**  
Associate Professor and Program Director

The Advanced Education Program in Pediatric Dentistry offers the student a comprehensive 24-
month course of study in clinical and didactic pediatric dentistry. The program is designed to meet the educational requirements for limitation of practice to the specialty of pediatric dentistry and examination by the American Board of Pediatric Dentistry. The program emphasizes a diversified educational experience. The program places emphasis on all phases of pediatric dentistry including trauma, preventive dentistry, restorative, endodontics, periodontics, oral surgery, orthodontics and hospital dentistry. The program enables the student to provide comprehensive oral health care for the well child, the medically compromised and children with special needs. There is extensive use of various treatment modalities for pain control and behavioral management, such as sedation, analgesia and general anesthesia. Research experience is gained through completion of an individual research project and master’s thesis.

Seminars are held in pediatric dentistry, orthodontic diagnosis and treatment, treatment planning, growth and development, cephalometric analysis, pediatric dentistry literature review, and behavior guidance. Formal courses in biostatistics, principles of pediatrics, pediatric advanced life support, head and neck anatomy, neurodevelopmental disabilities, leadership seminars, basic sciences, and clinical core courses are required. The students participate in undergraduate clinical teaching and supervision.

One-month rotations occur in general anesthesia, and two-week rotations occur in the pediatric emergency room, pediatric medicine and oral pathology. During the year, rotations in cleft palate, craniofacial anomalies and hemophilia occur. Optional elective rotations are available in treating institutionalized handicapped patients (in Lynchburg) and in providing treatment in rural areas that have low access to dentistry on the school’s mobile dental van. Elective didactic courses also are available.

Students completing the program earn a specialty certificate in pediatric dentistry and a Master of Science degree. Students must complete the requirements for the master’s degree prior to being awarded the specialty certificate.

The program is accredited by the Commission on Dental Accreditation of the American Dental Association.

**Periodontics**

**Thomas C. Waldrop**
Professor and Program Director

The advanced education program in periodontics consists of a 36-month clinical and didactic curriculum leading to a certificate in periodontics. Second- and third-year residents receive four weeks leave time and first-year residents, three weeks. All additional absences from the program must be approved by the program director. Students are responsible for all materials and make up of lost clinical time. Courses in the basic and clinical sciences, medicine, head and neck anatomy, statistics, and advanced cardiac life support are required. Students are responsible for attending and preparing for lectures, current and periodontal literature, medical-oral medicine, treatment planning, case presentation, and surgical seminars. No grade less than 80 percent or passing is acceptable from any periodontal or basic science course work. Less than passing grades may require retesting or retaking of a course. Students are expected to be able to utilize
a computer to prepare lectures and to access Internet resources.

Students are responsible for documentation of clinical and course work data. Specified digital intra-oral camera and documentation of all clinical cases and department archiving is required. Students are responsible to the service for rotations in general medicine, dental anesthesiology and oral pathology. Proficiency and certification in intravenous conscious sedation is required. Students are responsible for clinical and classroom teaching to undergraduate and specialty students. Research on a topic that is reviewed and approved by a faculty committee is required. Upon completion of the research, the student is required to prepare a thesis, defense and manuscript for publication. Certificates are not awarded until completion of the Master of Science requirements. Students are responsible for the purchase of program-required equipment, instruments, books and all associate fees. All students are required to become student members of the American Academy of Periodontology.

**Prosthodontics**

**David R. Burns**

Professor and Program Director
School of Dentistry

Combined D.D.S. and M.S. or Ph.D. programs

The dental curriculum provides an opportunity for interested dental students to enter a combined D.D.S./M.S. or Ph.D. program.

Individualized curricula are developed for such students with the approval of the students’ advisers in the graduate department of study and the assistant dean for research of the School of Dentistry. Ordinarily, the combined program requires more than four years to complete requirements for both degrees. For further details, contact the assistant dean for research at the School of Dentistry.
Combined M.S./Ph.D. and D.D.S. degree programs

In cooperation with the School of Dentistry, students in dentistry with an interest in academic and research careers are afforded the opportunity to undergo advanced-degree training while in dental school or residency. Admission of students enrolled in the School of Dentistry to combined degree programs is processed through the Office of Graduate Education of the School of Medicine by established procedures. The Dental Aptitude Test may be accepted in lieu of the GRE as an admission requirement. No application fee is required of students already regularly enrolled as degree-seeking graduate students at the university.

The requirements for a combined professional school/graduate school degree in basic health sciences are equivalent to those required of students seeking a graduate degree alone and are determined by the individual departments. A time limit of five calendar years for the M.S. and seven calendar years for the Ph.D. degree, beginning at the time of first registration in the graduate school, applies to work to be credited toward degrees for students in combined programs.
School of Dentistry

Department of Endodontics

Courses in endodontics (ENDO)

ENDO 622 Principles of Endodontics
ENDO 731 Endodontic Therapy
ENDO 739-749 Clinical Endodontics
School of Dentistry

Department of General Practice

Courses in general practice

DENS 515 Introduction to Clinical Dentistry
DENS 626 Clinical Skills
GENP 302 Dental Materials (Dental Hygiene)
GENP 307 Research Design and Biostatistics (Dental Hygiene)
GENP 501 Introduction to Preventive Dentistry
GENP 510 Dental Materials (Dental)
GENP 511 Dental Anatomy
GENP 512 Operative Dentistry
GENP 514 Fundamentals of Occlusion
GENP 620 Cariology
GENP 621 Operative Dentistry
GENP 733 Geriatric Dentistry
GENP 739-749 Clinical Operative
GENP 740 Practice Management
GENP 741 Practice Administration
GENP 742 Senior Treatment Planning Seminar
GENP 743 General Practice Restorative Unit
GENP 745 Clinical Principles of Restorative Dentistry
School of Dentistry

Department of Oral Pathology

Courses in oral pathology (ORPT)

ORPT 621 Dental Radiology
ORPT 622 Oral Pathology
ORPT 732 Clinical Oral Pathology and Oral Medicine
ORPT 737-747 Radiology Rotation

James C. Burns
Professor and Department Chair
School of Dentistry

Department of Oral and Maxillofacial Surgery

Courses in oral and maxillofacial surgery

DENS 741 Head and Neck Pain
ORSG 622 Introduction to Oral and Maxillofacial Surgery
ORSG 731 Management of the Medically Compromised Patient and Medical Emergencies in the Dental Office
ORSG 733 Principles of Oral and Maxillofacial Surgery
ORSG 739 Oral Surgery/Urgent Care Clinic
ORSG 749 Oral Surgery/Urgent Care Clinic
School of Dentistry

Department of Orthodontics

Courses in orthodontics (ORTH)

ORTH 623 Orthodontics
ORTH 733 Orthodontic Therapy
ORTH 739 Clinical Orthodontics

Steven J. Lindauer
Professor and Department Chair
School of Dentistry

Department of Pediatric Dentistry

Courses in pediatric dentistry (PEDD)

PEDD 622 Introduction to Pediatric Dentistry
PEDD 733 Advanced Pediatric Dentistry
PEDD 739-749 Clinical Pediatric Dentistry
School of Dentistry

Department of Periodontics

Courses in periodontics (PERI)

PERI 326 Periodontics (Dental Hygiene)
PERI 329 Periodontics II (Dental Hygiene)
PERI 626 Periodontics I
PERI 629 Periodontics II
PERI 733 Periodontics III
PERI 739-749 Clinical Periodontics

Harvey Schenkein
Paul Tucker Goad Professor,
Assistant Dean for Research
and Interim Department Chair
School of Dentistry

Department of Prosthodontics

Courses in prosthodontics (PROS)

PROS 622 Preclinical Fixed Prosthodontics
PROS 624 Preclinical Removable Prosthodontics
PROS 731 Complete Denture Prosthodontics
PROS 735 Removable Partial Denture – Lecture
PROS 737 Prosthodontics Diagnosis and Treatment Planning
PROS 739-749 Clinical Removable Prosthodontics
PROS 739-749 Clinical Fixed Prosthodontics
PROS 745 Clinical Principles of Fixed Prosthodontics

Conjoint courses

DENS 511 Dentistry and Education
DENS 515 Introduction to Clinical Dentistry
DENS 621 Occlusion
DENS 735, 745 Patient Management and Professional Conduct
DENS 625 Clinical Skills I
DENS 626 Clinical Skills II
DENS 733 Geriatric Dentistry
DENS 741 Head and Neck Pain
OCMB 510 Scientific Inquiry

John W. Unger
Professor, Eminent Scholar and Department Chair
The School of Education was established officially in 1964 as a part of the Richmond Professional Institute. In 1968, by action of the state legislature, the School of Education became a part of the newly formed Virginia Commonwealth University. In November 1975, the school moved its administrative offices to the present location in Oliver Hall on the Monroe Park Campus of VCU.

The central focus of the School of Education is on providing services to prospective and experienced professionals in education, including adult education and human resource development, health and movement sciences, leisure service management, sport leadership, and therapeutic recreation. The School of Education has a commitment to preparing high-quality professionals for urban, suburban and rural areas.

Accreditation

The School of Education is accredited by the Virginia Department of Education, the Southern Association of Schools and Colleges and the National Council for Accreditation of Teacher Education. The recreation, parks and tourism curriculum is accredited by the National Recreation and Park Association, American Association for Leisure and Recreation, and the National Council on Accreditation. The Athletic Training program is accredited by the Commission on Accreditation of Allied Health Education Programs. The school also holds membership in the American and Virginia Association of Colleges of Teacher Education and in the Holmes Partnership.

Mission

The School of Education is committed to excellence in the initial preparation and continuing development of professionals for leadership, teaching, service and scholarly inquiry in culturally diverse settings across the life span. The school emphasizes early childhood through secondary education and lifelong learning; scholarship that extends
knowledge and improves practice; and collaboration that connects the School of Education to the field of practice and supports schools and relevant educational and human service agencies.

The School of Education, as an integral part of a major urban research university, subscribes to and promotes the following values.

- The school as an example of the highest quality teaching and learning.

- The school as a diverse community of learners and scholars who, guided by democratic principles of participation, demonstrate a commitment to:
  - high professional standards and sustained faculty development,
  - a collaborative approach to teaching, scholarship and service both within and across disciplines,
  - inquiry that results in the scholarship of application, integration and teaching, as well as the scholarship of discovery, and
  - nurturing national and international relationships.

- The school as a leader providing quality education for students with individual and diverse needs. The school’s graduates:
  - demonstrate a body of knowledge from a foundational core appropriate to their specialization(s), and
  - exhibit values and behaviors appropriate for effective professional practice in a democratic society.

- The school as a partner with public and school communities in addressing today’s educational challenges.

Organization

The chief administrative office for the School of Education is the Office of the Dean. The school is organized for the management of instruction and degree programs into eight departments:

Department of Counselor Education
Department of Educational Leadership
Department of Exercise Science
Department of Foundations of Education
The departments are led by department chairs with faculty assuming responsibility for curriculum and program advisement. The Offices of Business Services and Student Services provide support for the academic research and service initiative in the School of Education.

## Degree programs

The School of Education offers degree programs leading to the following:

### Master of Teaching

- early childhood/elementary education
- middle education
- secondary education
  - English
  - foreign languages
    - French
    - German
    - Spanish
  - history
  - history and social studies
  - mathematics
  - sciences
    - biology
    - chemistry
    - interdisciplinary science
  - physics
  - special education
    - dual endorsement in emotional disturbance and mental retardation,
    - emotional disturbance and learning disabilities, or learning disabilities and mental retardation

### Master of Education

- administration and supervision
  - administration and supervision PK-12
  - educational administration (optional track)
- adult education and human resource development
- counselor education
  - school counseling PK-12
- curriculum and instruction
  - early education
  - instructional technology
  - library/media
  - middle education
secondary education
  English
foreign languages
  French
  German
  Spanish
mathematics
sciences
  biology
  chemistry
  interdisciplinary science
  physics
reading
special education
  early childhood special education
  emotional disturbance
  learning disabilities
  mental retardation
  severe disabilities

Master of Science
health and movement sciences
recreation, parks and sport leadership

Ph.D. in Education
adult education and human resource development
educational leadership
instructional leadership
research and evaluation
special education and disability leadership
urban services leadership

Ph.D. in Rehabilitation and Movement Science
cardiopulmonary track
neuromusculoskeletal dynamics track

Post-baccalaureate certificates
human resource development
library/media specialist
teaching
  secondary education
    English
    foreign languages
      French
      German
      Spanish
  history/social studies
Post-master’s certificates
principal and supervisor
reading specialist

Extended Teacher Preparation Program

Any undergraduate student admitted to the university who declares a major in the College of Humanities and Sciences is also eligible to designate a specialization in early, middle, secondary or special education. Once the student has completed 90 credit hours, he or she applies to the Graduate School to begin graduate study in the School of Education. Upon successful completion of the program, the student receives a baccalaureate degree and a Master of Teaching degree. See the Department of Teaching and Learning and the Department of Special Education and Disability Policy sections in this bulletin for program details.

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 degree programs offered by the School of Education are approved by the Virginia Department of Education and the National Council for the Accreditation of Teacher Education. The commonwealth of Virginia is a member of the National Association of State Directors of Teacher Education and Certification, which has a national reciprocity agreement for teacher licensure. Therefore, all graduate programs in the School of Education have approved program status and are a part of the NASDTEC Certification Reciprocity Agreement. Information about VCU students’ performance 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: http://www.soe.vcu.edu/ted/degree.html.

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 Secondary 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 initial licensure who enter a program should expect to take some
additional course work prior to the awarding of a degree.

Individuals seeking initial licensure to teach must pass the Virginia Board of Education licensure examinations, currently Praxis. Admission to teacher preparation and clinical experiences requires that candidates meet or exceed the Virginia scores for Praxis I.

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.

**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. The Departments of Exercise Science, Recreation, Park and Sport Management, and Teacher Education: Health and Physical Education are located in the Franklin Street Gymnasium, which provides teaching facilities as well as faculty and administrative offices.

**Support/resource offices**

Various resource offices have been developed in the School of Education to provide support services for students, faculty and programs. These support units include the Office of Student Services, Office of Business Services, the Office of Doctoral Studies, School of Education Associates Office and the Instructional Technology Center, which includes two computer laboratories.

**Student Services Center**

**Program and test information**

The Student Services Center provides basic information regarding the programs offered by the School of Education. Students may obtain various program forms in this office. Information regarding the Praxis series, Graduate Record Examination (GRE) and the Miller Analogies Test (MAT) also can be obtained here.

**Placements**

Placements for students in practica, internships and externships are coordinated through the Student Services Center. These placements are primarily in school systems and other educational facilities located in the city of Richmond and the counties of Chesterfield, Hanover
Financial aid

Information and applications for certain assistantships, fellowships and scholarships that are available to School of Education students can be obtained in the Student Services Center. All require that applicants be fully admitted to a program within the School of Education in order to be eligible. In addition to School of Education awards, each department may have grant-funded, student worker positions available. For information on these opportunities, contact the appropriate department chair.

Information on financial aid administered by the university can be found in the Graduate Studies at VCU section of this bulletin.

Licensure and endorsement

The Student Services Center serves as the resource for information, materials and applications for those students seeking licensure and/or endorsement for educational personnel in Virginia.

Career files

The Student Services Center maintains career-placement files for graduates with licensure. For further information on this service, contact the office at (804) 827-2670.

Doctoral Studies Office

The Doctoral Studies Office 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 Office 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.

Instructional Technology Center

The Instructional Technology Center (ITC) provides educational technology and media support to students, faculty and staff in the School of Education. Within the ITC are four components, each serving the school in unique ways.

The Computer Teaching Lab is a state-of-the-art computer facility where faculty help prospective teachers learn how to use computer technology in classrooms. The Open Computer Lab is
available for student use approximately 14 hours each day.

The Infusio Lab enables students to participate in real-time distance learning activities. The fourth component, Computing Services, has the responsibility for maintaining all of the computers and related equipment in the School of Education.

## 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 centers and institutes include:

- Behavioral Intervention Program
- Career Connections Techlink
- Center for School-Community Collaboration
- Central Virginia Leadership Academy
- Commonwealth Educational Policy Institute
- 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

## Admission procedures for graduate study

### Application procedures

Application forms and instructions for applying to all graduate programs are available on the Graduate School Web site at [http://www.vcu.edu/graduate](http://www.vcu.edu/graduate). Note that applications cannot be processed until they are complete (including test scores). Admission information specific to each program can be found in the division section of this bulletin.

### Test scores

Either the GRE, General Aptitude portion, or the MAT is required for the Master of Teaching, the Master of Education, the Master of Science, the Post-master's Certificate for Principals and Supervisors, and the Post-baccalaureate Certificate in Teaching. The Ph.D. program requires the GRE, General Aptitude portion.

Praxis I, although not required for graduate admission, is required for placement in clinical experiences (practica, internships and certain externships) as well as for licensure in Virginia. Contact the Student Services Center for applications for Admission to Teacher Preparation, booklets on Praxis I and Praxis II, and information regarding offerings of the Praxis examinations by paper and pencil or by computer. Information about the tests may be obtained in the Student
Application deadlines

The following application deadlines have been established for the Master of Education, the Master of Science, the Master of Teaching and the Post-baccalaureate Certificate in Teaching.

<table>
<thead>
<tr>
<th>Date</th>
<th>Term of Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 15</td>
<td>Summer session term of entry</td>
</tr>
<tr>
<td>May 15</td>
<td>Fall semester term of entry</td>
</tr>
<tr>
<td>Nov 1</td>
<td>Spring semester term of entry</td>
</tr>
</tbody>
</table>

The Ph.D. in Education has the following application deadline:

<table>
<thead>
<tr>
<th>Date</th>
<th>Term of Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 15</td>
<td>Fall semester term of entry</td>
</tr>
</tbody>
</table>

Students who are unable to enroll for the semester for which they are accepted must request a deferment.

General admission requirements

The admission decision will be made on an overall analysis of the following for each degree program. See each division section for any additional information.


- A minimum GPA of 3.0 on a 4.0 scale on the last 60 semester hours of study.
- Applicants whose GPA during the last 60 hours of course work falls between 2.8 and 2.99 on a 4.0 scale will be considered for provisional admission. See the Graduate Studies at VCU chapter of this bulletin for further information on provisional admission.
- Scores on the GRE or the MAT.
- An interview with the applicant may be required by the faculty of the program to which the applicant is seeking admission.

Ph.D. in Education

Refer to the Ph.D. in Education program section of this bulletin for admission requirements.

Ph.D. in Rehabilitation and Movement Science

Refer to the Ph.D. in Rehabilitation and Movement Science section of this bulletin for admission requirements.
Advising and student program planning

All students admitted to the School of Education are assigned advisers. Students are expected to work with their adviser to plan their programs of study. Each graduate program agreement, or changes thereto, must be approved by the adviser and the appropriate department head, or the senior associate dean for academic programs. Courses taken without approval are taken at the student’s risk. Each student is required to complete and file a program plan with the department before the completion of the sixth credit hour.

Steps to completing M.Ed. and M.S. degrees

<table>
<thead>
<tr>
<th>Step</th>
<th>When</th>
<th>Where</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Admission</td>
<td>0-6 hours</td>
<td>Office of Graduate Studies in Education</td>
</tr>
<tr>
<td>2. Program of studies</td>
<td>0-6 hours</td>
<td>With adviser, approved by department head</td>
</tr>
<tr>
<td>3. Candidacy</td>
<td>12-18 hours</td>
<td>Application approved by adviser, core coordinator, department head</td>
</tr>
<tr>
<td>4. Comprehensive examination*</td>
<td>30 hours</td>
<td>Application to department office</td>
</tr>
<tr>
<td>5. Externship or internship</td>
<td>Usually the last semester of course work</td>
<td>Application from Office of Academic Services</td>
</tr>
<tr>
<td>6. Graduation</td>
<td>Last semester of course work; see current bulletin for deadline</td>
<td>Application from registrar (approved by adviser, department head, dean’s office and returned to registrar)</td>
</tr>
</tbody>
</table>

* Not required in M.S. in Recreation and being phased out in the M.Ed. in Curriculum and Instruction.

The chart outlines the general steps to completing the Master of Education and the Master of Science degrees. All other graduate-level students in the School of Education should refer to the appropriate section of this bulletin for information specific to these programs.

Admission to candidacy

Admission to graduate study in the Master of Education or Master of Science programs does not constitute candidacy for a degree. Rather, students who have been admitted to graduate study are advanced to degree candidacy upon the recommendation of the adviser, core faculty and department in which the degree is sought.

Advancement to degree candidacy requires that students must have completed at least 12 but no more than 18 semester hours of graduate study with a minimum GPA of 3.0; must have demonstrated clearly the aptitude and ability to pursue graduate study, including independent study; must have exhibited a commitment to education as a profession; and must have demonstrated promise for a successful career in the field selected in terms of temperament and personality. Specific courses may be required prior to application for candidacy. Admission to degree candidacy is not an automatic process. Students must file an approved application for
candidacy with their departments. Only students who have been admitted to candidacy may pursue additional work toward the degree.

Comprehensive examination

- Some students in a Master of Education or Master of Science in Health and Movement Science program must take a three-hour written comprehensive examination.

- Written examinations will be given on the first Saturday in November, the fourth Saturday in March, and the second Saturday in July. Students must notify the department in writing of the intention to take the examination at least 30 days prior to the published date. All comprehensive examinations must be taken on dates indicated except for religious or health reasons. Any exceptions must be approved in advance by the department head.

- A minimum of three faculty members, designated by the core faculty, will evaluate each examination independently. Satisfactory performance on the comprehensive examination requires approval of two of the three evaluators.

- Any student failing the comprehensive examination must have a joint conference with at least two core faculty members, one of whom is the student’s adviser, before taking the comprehensive examination again.

- During the conference, the core faculty members may recommend additional academic preparation and/or competencies that must be met by the student prior to retaking the comprehensive examination.

- The student will be notified by letter of the recommendations made by the core faculty in the conference.

The student will have only two opportunities to take the comprehensive examination. Failure to pass the comprehensive examination the second time will result in the student being dropped from the degree program.

Transfer credit

A maximum of six credit hours of acceptable graduate credit may be transferred into a graduate degree program. Course work taken prior to being admitted to a program in the School of Education and not applied to another degree may be applied for transfer. This includes course work taken at VCU.

Course work submitted for transfer is evaluated by the student’s adviser and the department head. See the Ph.D. in Education program section of this bulletin for information regarding transfer credit for this program.

As a general rule, continuing education courses taken at institutions other than VCU will not be transferred.

Students seeking to earn credit at other institutions after acceptance to a graduate program in the School of Education must receive prior approval from their advisers and the department head, or the director of graduate studies for the Ph.D. program. See the Graduate Studies at VCU section of this bulletin for further information regarding transfer credit.
Awards

The **Virginia Arnold Scholarship** is awarded annually to one or more outstanding students who demonstrate financial need and who are enrolled in either the early or middle education teacher preparation program. It is supported by an endowment created by Arnold, a former VCU faculty member.

The **William C. Bosher Jr. Scholarship** is awarded annually to an outstanding student in the Educational Administration program. The scholarship is supported by the School of Education.

The **Pearl Burford Scholarship** was established by her former students at Richmond Professional Institute. It is awarded to students planning to become elementary teachers.

The **Jack A. Duncan Scholarship** is awarded annually to a student in the M.Ed. in Counselor Education program who possesses promise as an effective school counselor for the future. Applicants must have a GPA of 3.0 or higher and be able to demonstrate personal and academic qualities predictive of success as a counselor. The scholarship honors Dr. Jack Duncan, professor emeritus of counselor education.

The **Patricia H. Duncan Scholarship**, established by friends and colleagues of Duncan, was endowed in 2000. This scholarship, in the endowed amount of $500, is awarded to graduate students who have an interest in language arts education.

The **Fleming Scholarship** was established to honor Drs. Gladys and Robert Fleming, long-time professors in the School of Education, who exemplified the value of the arts and humanities in their teaching. The award is given annually to a graduate student in administration and supervision, adult education, or counselor education. The successful applicant must demonstrate a commitment to humanities education and must be registered for six or more credit hours.

The **Arnold P. Fleshood Scholarship** is awarded annually to a graduate student in the School of Education in reading/language education or a related field with an interest in reading/language arts.

The **Howard G. Garner Scholarship for Developmental Disabilities and Interdisciplinary Studies** was established in honor of Dr. Howard G. Garner — a former faculty member and the first director of the Virginia Institute for Developmental Disabilities — by friends and family of Garner. This $500 endowed award provides financial assistance for a trainee at the graduate or advanced level of education to pursue or continue interdisciplinary study in the field of developmental disabilities.

The **Health and Physical Education Scholarship**, endowed in the spring of 1994, is awarded to an outstanding education student majoring in a health or physical education subject area. Preference will be given to undergraduate health and physical education majors classified at sophomore, junior or senior level and have a 2.5 overall GPA. This scholarship is intended to benefit academically talented students who also have been active in university and community service.
The **Jessie Hibbs Scholarship** is funded by the VCU-MCV Women’s Club. This scholarship is awarded to a female graduate student with dependent child(ren) who is enrolled in a graduate program on the Monroe Park Campus. The School of Education Scholarship Committee nominates one candidate for this university-wide competition. Applicants must be Virginia residents as determined by Records and Registration and be eligible for financial assistance as determined by the Office of Financial Aid.

The **N. Thelma Jones Scholarship** is awarded annually to an outstanding fifth-year student in the Master of Teaching program (secondary education). The scholarship is supported by an endowment honoring this former teacher by her brother.

The **Claire McCarthy Recreation Scholarship** was established in 1964. This scholarship was created to honor Claire McCarthy, one of the first graduates of the recreation curriculum. She also served in the Richmond Department of Recreation and Parks for many years. Following her death in 1964, members of the community established this scholarship fund for outstanding upper-level recreation majors. Applicants must be enrolled as full-time Recreation, Parks and Tourism majors, have completed 60 or more credit hours prior to the semester of the award; have a grade point average of 2.5 in both major and overall course work; and be able to demonstrate motivation, need and suitability for a career in recreation.

The **Ann Elizabeth Marston Scholarship** is awarded annually to a student planning a career in elementary or secondary education and who demonstrates both leadership qualities and a need for financial assistance. The award is supported by an endowment established by Dr. and Mrs. Robert A. Wilson in memory of his aunt who helped finance his education.

The **S. Virginia and Berta M. Newell Endowed Scholarship** is awarded annually to an outstanding student in a teacher preparation program in either early or middle education, who demonstrates financial need. It is supported by an endowment from their brother honoring his sisters who graduated from Richmond Professional Institute.

Sponsored by the VCU Chapter of Phi Delta Kappa, the **Phi Delta Kappa Scholarship Grant for Prospective Educators (VCU Chapter)** is awarded to an excellent education student who is interested in teaching or professional education as a career. The primary criteria used to select the recipient of this $1,000 endowed award will include scholarship, recommendations, written expression, interest in teaching or professional education as a career, and school and community activities.

The **Richard J. Rezba Scholarship in Science Education** was established in 2003 to honor Rezba on his retirement. Known nationally as a science educator, Rezba has long been considered one of the outstanding science educators in Virginia. Applicants must be enrolled as full-time science education graduate students in either the M.T. or M.Ed. programs in curriculum and instruction.

The **Seyfarth Family Scholarship** was established in memory of Susanna Seyfarth by her husband, Dr. John T. Seyfarth, and by other surviving family members and close friends. Applicants must be admitted to the Educational Leadership Track of the Ph.D. in Education program, have a GPA of 3.5 or above, and be committed to a career in public education.
The **Office of Graduate Studies in Education** administers funds made available through the State Council of Higher Education in Virginia Tuition Scholarship Program. SCHEV tuition assistance monies are only available to full-time master’s and Ph.D. students who have been admitted to the school with no provisions. The SCHEV program provides funds to be used for tuition and fees. Once the award is made, the funds are transferred directly to the student’s account at VCU. In the event the student has received additional financial aid from other sources, depending on the stipulations placed on such awards and whether tuition has been paid in full, the amount of the graduate tuition assistance may have to be adjusted.

Applicants to the **School of Education Alumni Board Scholarship** must be enrolled in an undergraduate or graduate program in the School of Education. This scholarship varies in amount and will be awarded on both potential academic contributions to the field of education and on financial need.

Applicants to the **School of Education Faculty Organization Scholarship** must be enrolled in an undergraduate or graduate program in the School of Education, plan to enroll in a minimum of six hours per semester during the year of the award and demonstrate potential to be competent professionals in their intended field. The applicants also must demonstrate financial need.

The **Schumacher Fund for Dissertation Research** was established by Dr. Sally A. Schumacher, the first full-time faculty member in educational research and evaluation, in memory of her parents, Professor F.X. Schumacher and Mrs. M.M. Schumacher. It provides financial assistance to doctoral students in the School of Education who are undertaking dissertations.

The **Departments of Special Education and Disability Policy and Teaching and Learning Scholarship** was established by faculty for an academically talented major pursuing a teaching career working with children and youth who come from traditionally underserved populations or who demonstrates a commitment to teaching students who present special challenges. Applicants must plan to take a minimum of six credit hours each semester during the period of the award and have a minimum grade point average of 3.0.

The **Gaynelle Whitlock Scholarship** honors Dr. Gaynelle Whitlock, a former associate dean of the school. It will provide financial assistance for graduate students in the counselor education program. Preference is given to individuals preparing to become elementary school counselors in the commonwealth of Virginia.

The **John Van de Walle Scholarship** was established by Dr. John Van de Walle, retired mathematics education professor, during the spring of 2002. Applicants must be students enrolled in the Master of Education program in curriculum and instruction with a concentration in mathematics.

The **Willie W. Whitlock Merit Scholarship** was established by Mr. Willie W. Whitlock Esq. (B.S. 1950) as a merit scholarship in education to honor his sister Dr. Gaynelle Whitlock, a faculty member and former associate dean in the School of Education.
The MERC Research Fellowship Awards are designed to prepare individuals for leadership and research positions at the school, division, state and federal levels and/or teaching, research and consulting positions in higher education. MERC Fellows support the work of the Metropolitan Educational Research Consortium (MERC), which is composed of VCU and Virginia State University and regional metropolitan school divisions.
Department of Counselor Education

The Department of Counselor Education prepares counselors with the specialized knowledge and skills required for placement in elementary, middle and high schools 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, have the skills necessary to evaluate relevant research and are committed to evaluating their counseling interventions.

Andrew V. Beale
Department Chair
M.Ed. in Counselor Education
PK – 12
The M.Ed. in Counselor Education program is designed primarily to prepare counselors for elementary, middle and high schools in the commonwealth of Virginia and the nation, and secondarily to prepare counselors for higher education and community agencies. The program leads to school counseling licensure and preparation for advanced graduate work at the post-master's level. While licensure as a teacher and teaching experience may be required for employment as a school counselor, applicants for the M.Ed. in Counselor Education program do not have to meet such criteria.

The faculty makes every effort to assist students in individualizing a graduate program to match their professional needs and interests. However, the mature student will recognize that individualization takes place in an environment of legitimate constraints revolving around institutional and license requirements. Faculty members view each program as more than simply an aggregate of courses, and students should plan all program work with their faculty advisers.

For students who already have a master’s degree in education, the 30 credits of program core courses in guidance and counseling also will lead to recommendation for licensure as a school counselor. Students wishing this licensure must meet with the core coordinator and file a plan of study. Although students holding master’s degrees do not apply for admission to the graduate program, they must file the appropriate plan of study in order to qualify for the VCU approved program of study. No course work taken more than seven years prior to applying for licensure as a school counselor will count toward meeting VCU’s approved program course equivalents.

**Guidance and counseling**

<table>
<thead>
<tr>
<th>Foundations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Human development and learning</strong></td>
</tr>
<tr>
<td>EDUS 605 Child and Adolescent Growth and Development</td>
</tr>
<tr>
<td><strong>Cultural, historical and philosophical</strong> (one of the following)</td>
</tr>
<tr>
<td>EDUS 601 Philosophy of Education</td>
</tr>
<tr>
<td>EDUS 608 History of Western Education</td>
</tr>
<tr>
<td>EDUS 610 Social Foundations of Education</td>
</tr>
<tr>
<td>EDUS 612 Education and the World’s Future</td>
</tr>
<tr>
<td>EDUS 614 Contemporary Educational Thought</td>
</tr>
<tr>
<td>EDUS 673 Seminar on Educational Issues, Ethics and Policy</td>
</tr>
</tbody>
</table>
### Research
EDUS 660 Research Methods in Education

#### Program core
- CLED 600 Introduction to Guidance
- CLED 601 Theories of Counseling
- CLED 602 Practicum: Techniques of Counseling
- CLED 603 Group Procedures in Counseling
- CLED 604 Practicum: Group Procedures in Counseling
- CLED 605 Career Information and Exploration
- CLED 606 Assessment Techniques for Counselors
- CLED 610 Guidance in Elementary and Middle Schools
- CLED 621 Secondary School Guidance Seminar
- EDUS 700 Externship (six credits)

300 clock hours of actual work in an appropriate setting. Students wanting placement in elementary, middle or high schools may not fulfill this requirement during the summer.

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Virginia Commonwealth University
Graduate Programs: Graduate School
Professional Programs: Vice President for Health Sciences
Updated: August 22, 2004
School of Education

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.

The department offers programs in two major areas of study. The first leads to the M.Ed., Post-master’s Certificate, and Ph.D. in Education: Educational Leadership. Individuals who complete one of those programs may qualify for endorsement by the Virginia Department of Education as principal/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.

The second area of study is in adult education and human resource development. The Master of Education degree in adult education and human resource development is a 39-credit program of study that prepares individuals for a broad range of positions related to the development of adults. Graduates are found in major corporations, state and federal agencies, nonprofit organizations, community colleges, and universities. Admission to the program is predicated on the “whole person” concept, taking into account life experience, academic record, references and the reasons for the student’s interest in the program.
Master of Education in Educational Leadership

The M.Ed. in Educational Leadership is a 39-hour program designed for individuals who aspire to positions as instructional leaders in schools. Applicants are expected to have had at least two years successful teaching experience. Students who wish to be endorsed as a school principal also will need to complete an assessment program.

**Core cluster**

- ADMS 600 Public School Administration
- ADMS 605 Organizational Theory, Structure and Culture in Educational Settings
- ADMS 606 Organizational Behavior and Change in Educational Settings
- ADMS 611 School Law
- EDUS 660 Research Methods in Education
- EDUS 673 Seminar on Educational Issues, Ethics and Policy

**Specialization clusters**

- ADMS 601 Processes of Instructional Leadership
- ADMS 604 Principalship Seminar
- ADMS 620 Improving School Programs and Performance
- ADMS 621 Management of School Operations and Support Programs
- ADMS 641 School Personnel Administration
- TEDU 615 Curriculum Development
- EDUS 609 Learning Theories in Education
- EDUS 672 Internship

Students take ADMS 604, 621, 641 and EDUS 672 plus three of the other four courses.

**Certification**

- Principals Certification Assessment Program or School Leaders Licensure Assessment

M.Ed. in Educational Leadership (optional track)

The M.Ed. in Educational Leadership (optional track) is a 36-hour program designed for individuals who aspire to leadership or policy positions in educational settings other than schools. This program will not lead to certification as a school principal or supervisor.

All students take nine hours of foundations course work and 12 credits in the core cluster.
addition, with the approval of their advisers, all students develop a specialization consisting of 15 credit hours in an area of interest (higher education administrator, special education administrator, vocational administrator, personnel administrator or business/finance administrator).

<table>
<thead>
<tr>
<th>Credits</th>
<th>Foundations</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EDUS 604 Adult Development</td>
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</tr>
<tr>
<td></td>
<td>EDUS 660 Research Methods in Education</td>
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</tr>
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<td></td>
<td>EDUS 673 Seminar on Educational Issues, Ethics and Policy</td>
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</tbody>
</table>

<table>
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<th>Credits</th>
<th>Core clusters</th>
<th>12</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>ADMS 600 Public School Administration</td>
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</tr>
<tr>
<td></td>
<td>ADMS 605 Organizational Theory, Structure and Culture in Educational Settings</td>
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<tr>
<td></td>
<td>ADMS 606 Organizational Behavior and Change in Educational Settings</td>
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<tr>
<td></td>
<td>ADMS 611 School Law</td>
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</table>

<table>
<thead>
<tr>
<th>Credits</th>
<th>Selectives</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Select five courses with approval of adviser</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EDUS 672 Internship is recommended but not required</td>
<td></td>
</tr>
</tbody>
</table>

| Total | 36 |
School of Education

Post-master’s Certificate in Educational Leadership

Individuals who have completed an M.Ed. in Education or equivalent may qualify for endorsement as a school principal or supervisor by completing the Post-master’s Certificate in Educational Leadership. Applicants must have had two or more years teaching experience and must have earned a master’s degree in education. All requirements for admission to the graduate school apply to applicants for the post-master’s certificate.

Upon satisfactory completion of an approved plan of study, the individual will be recommended to the Virginia Department of Education for certification as principal and supervisor.

Students are required to complete a minimum of 21 hours beyond the master’s, including 18 credits in required courses and three credits in selective courses. Equivalent courses taken within the last five years may transfer; advisers tailor the selective courses based upon students’ experiences and goals.

**Required courses**
- ADMS 600 Public School Administration
- ADMS 601 Processes of Instructional Leadership
- ADMS 604 Principalship Seminar
- ADMS 605 Organizational Theory, Structure and Culture in Educational Settings
- ADMS 611 School Law
- EDUS 672/700 Internship/Externship

**Restricted selective** (with approval of adviser)
- ADMS 606 Organizational Behavior and Change in Educational Settings
- ADMS 620 Improving School Programs and Performance
- ADMS 621 Management of School Operations and Support Programs
- ADMS 641 School Personnel Administration

**Total credits**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses</td>
<td>18</td>
</tr>
<tr>
<td>Restricted selective</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
</tr>
</tbody>
</table>
Master of Education in Adult Education and Human Resource Development

The Master of Education in Adult Education and Human Resource Development is a 39-credit program of study that prepares individuals for a broad range of positions related to the development of adults. Graduates are found in major corporations, state and federal agencies, nonprofit organizations, community colleges, and universities. Admission to the program is predicated on the “whole person” concept, taking into account life experience, academic record, references and the reasons for the student’s interest in the program.

The program consists of three clusters. Over one-third of the courses taken are at the student's election and customized to student interest (electives/specialization). The elective courses can be taken in any school at the university. The option of an externship also is available, allowing the student to gain firsthand work experience in collaboration with a private business or governmental organization.

**Foundations cluster**
EDUS 660 Research Methods in Education
EDUS 604 Adult Development
EDUS 673 Seminar on Educational Issues, Ethics and Policy or several other course offerings related to educational philosophy

**Core program cluster**
ADLT 601 The Adult Learner
ADLT 602 Adult Program Planning, Management and Evaluation
ADLT 603 Learning Strategies for Adults
ADLT 604 Adult Education Seminar
ADLT 605 Learning Technologies for Adults

**Electives/specialization cluster**
A variety of options are available, including a specific mix of courses of interest to the student. Some of the specialization cluster options are:
• Human resource development
• General adult education
• Health education services
• Higher education
• Information systems
• Correctional education
• Educational counseling
• Staff development
• Administrative and public systems
• Educational research and organizational evaluation
• Adult literacy
School of Education

Post-baccalaureate Certificate in Human Resource Development

An 18-credit-hour program is offered in human resource development for those wishing to pursue career interests in this field. Students may elect to earn the M.Ed. after completing the certification program, pursue it concurrently, or complete the certificate before taking other courses in the M.Ed. program. Students must have a minimum of four "A's" in the certification program and no grade lower than "B" in the remainder, to gain certification. A certificate and a customized letter citing student capabilities are issued upon program completion. The six required courses are:

- ADLT 605 Learning Technologies for Adults
- ADLT 620 Human Resource Development Overview
- ADLT 621 Skills Development for Human Resource Development
- ADLT 622 Human Resource Development Strategies and Interventions
- ADLT 704 Groups, Teams and Organizational Learning
- ADLT 705 Global Human Resource Development
School of Education

Department of Exercise Science

The Department of Exercise Science meets the needs of those students interested in the fields of medicine, rehabilitation, fitness, and health and/or wellness. The department houses the Master of Science in Health and Movement Science, which requires 36 credits with a central focus on the sciences. The program is flexible enough so that students, with the assistance of an adviser, can design a program that truly meets their professional goals.

The Doctor of Philosophy in Rehabilitation and Movement Science is interdisciplinary in nature and includes faculty members from the departments of Exercise Science in the School of Education, Physical Therapy in the School of Allied Health Professions and Physical Medicine and Rehabilitation in the School of Medicine.
Master of Science in Health and Movement Sciences

This program provides advanced course work for students interested in the application of health and movement science principles to exercise science, teaching and sports medicine. Applicants planning to enter the teaching profession should hold a valid teaching endorsement. This program does not provide opportunities for initial licensure in health and physical education.

The Master of Science in Health and Movement Sciences program of study offers a thesis and non-thesis option. Both options require a minimum of 36 total graduate credit hours for completion of the degree program.

After completing at least 12 graduate credits and not more than 18 credits, with a minimum GPA of 3.0, all students must apply for advancement to candidacy. In the thesis option, students must complete HEMS 798 Thesis for six credit hours and 30 hours of prescribed course work. Students enrolling in this option will not be required to complete a comprehensive examination. In the non-thesis option, students must complete 36 hours of prescribed course work and must pass a comprehensive examination, which is taken after completing 30 hours of course work.

<table>
<thead>
<tr>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Research core</td>
</tr>
<tr>
<td></td>
<td>HEMS 600 Introduction to Research Design in HEMS and RPSL (3)</td>
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<tr>
<td></td>
<td>HEMS 601 Movement Physiology (3)</td>
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<tr>
<td></td>
<td>HEMS 602 Statistical Application in HEMS and RPSL (3) or BIOS 543 Statistical Methods I (3)</td>
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<tr>
<td></td>
<td>HEMS 604 Nutrition for Health and Physical Activity (3)</td>
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<tr>
<td></td>
<td>HEMS 605 Psychology of Physical Activity (3)</td>
</tr>
<tr>
<td>6</td>
<td>Thesis option</td>
</tr>
<tr>
<td></td>
<td>HEMS 798 Thesis (6)</td>
</tr>
<tr>
<td>9-15</td>
<td>Specialty (select course work with consultation of adviser)</td>
</tr>
<tr>
<td></td>
<td>HEMS 500 Motor Development of Young Children (3)</td>
</tr>
<tr>
<td></td>
<td>HEMS 505 Contemporary Issues in Health (3)</td>
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<tr>
<td></td>
<td>HEMS 521 Pathomechanics of Sports Injuries (3)</td>
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<tr>
<td></td>
<td>HEMS 550 Exercise, Nutrition and Weight Management (3)</td>
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<tr>
<td></td>
<td>HEMS 606 Psychosocial Aspects of Sport (3)</td>
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<tr>
<td></td>
<td>HEMS 610 Laboratory Techniques in Movement Science (3)</td>
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<tr>
<td></td>
<td>HEMS 611 Biomechanics of Human Motion (3)</td>
</tr>
<tr>
<td></td>
<td>HEMS 613 General Motor Ability Evaluation (3)</td>
</tr>
</tbody>
</table>
HEMS 614 Motor Assessment for Special Populations (3)
HEMS 615 Orthopaedics and Therapeutics in Sports Medicine (3)
HEMS 620 Motor Learning and Performance (3)
HEMS 660 Neuromuscular Performance (3)
HEMS 700 Externship (1-6)
HEMS 701 Clinical Exercise Physiology (3)
HEMS 741 Directed Research Study (3)
HEMS 751 Research Seminar in HEMS (1-3)

**Suggested outside electives**
(develop electives in consultation with adviser)

|minimum| 36|
Ph.D. in Rehabilitation and Movement Science

Ph.D. in Rehabilitation and Movement Science is an interdisciplinary degree program developed through a collaborative partnership of the departments of Exercise Science, Physical Therapy, and Physical Medicine and Rehabilitation. The mission of this collaborative degree program is to prepare applied scientists capable of approaching multifaceted health care, preventive medicine and rehabilitation initiatives from an integrative rather than competitive perspective, and to prepare graduates to assume leadership positions in higher education teaching, research and management within rehabilitation and movement science.

There are two program tracks: cardiopulmonary and neuromusculoskeletal dynamics. The cardiopulmonary track prepares individuals to teach, conduct research and direct external funding initiatives in the area of cardiopulmonary rehabilitation and physiology, particularly in areas associated with metabolic and chronic disease states. The neuromusculoskeletal dynamics track prepares individuals for teaching, research and clinical initiatives associated with the identification and rehabilitation of movement disorders.

Admission requirements

Admission decisions are made by an admissions committee comprised of faculty members from each of the major collaborating departments: Exercise Science, Physical Therapy and Physical Medicine and Rehabilitation. Applicants must have completed at least one of the following: a master’s degree in a related area, 30 hours of post-baccalaureate work (e.g. course work at 500 level or greater), or a first professional degree program. Admission decisions are made only on the basis of a completed application packet.

Applicants for admission to the program must complete an admission packet that includes the VCU Application for Graduate Study as well as supplementary program materials. Admission packets are available from:

**Graduate School**

Virginia Commonwealth University
Moseley House
P.O. Box 843051
Richmond, VA 23284-3051
http://www.vcu.edu/graduate
The entrance requirements fall into the following three categories. All criteria must be completed for consideration for admission.

**Academic criteria**

- A completed VCU Graduate School Application.
- Two official and up-to-date copies of all transcripts of the applicant’s undergraduate and graduate record indicating that the applicant has completed the minimum required prerequisite course work.
- Official and current scores (within the past five years) for the general test of the GRE. Older scores may be submitted and consideration will be based upon the time elapsed since last formal schooling, occupation success and research ability.
- Priority for admission will be given to the applicants who have attained at least 3.5 in all graduate work attempted and a combined verbal and quantitative score on the GRE of a minimum of 1,000. If the TOEFL is required, a minimum of 600 is expected.

**External criteria**

- A professional resume indicating an applicant’s educational and career experience as well as evidence of research potential.
- Completed reference forms from three individuals capable of evaluating the applicant’s academic and research potential.

**Written expression**

- A personal statement in which the applicant discusses his or her personal career goals and the manner in which this doctoral program would enhance those goals.
- A summary of motivation, education and aims in pursuing an interdisciplinary degree in rehabilitation and movement science.

Applicants being considered for admission must complete an interview with a Ph.D. admissions committee representative and/or research faculty member with whom the student would like to work.

The applicant is encouraged to check the status of his or her application packet to ensure that all components of the packet have been received. Inquiries should be made to the Office of Graduate Studies in Education. The Admissions Committee will not review incomplete packets.

**Transfer credit**

Students in the program may transfer up to nine credit hours into the program, including courses
taken at VCU prior to being admitted to the program. Note that credits earned for one degree cannot be applied to another degree.

**Curriculum**

The Ph.D. in Rehabilitation and Movement Science will require a minimum of 36 credit hours of course work and 12 credit hours of dissertation research. Students will be required to complete:

- 12 credit hours of research core courses comprised of a research design class, two classes in statistical application and an elective in the area of research design or statistics;
- 18 credit hours in a concentration comprised of a focus on course work in a specific discipline formulated with the major adviser and approved by the Admissions Committee of the degree program;
- three credit hours comprised of laboratory rotations in a minimum of two laboratories within the Rehabilitation and Movement Science program; each credit hour requires a minimum of 50 contact hours in the laboratory selected;
- three credit hours of professional development comprised of an interdisciplinary research/journal club seminar (one credit hour), a teaching practicum (one credit hour) and a presentation delivered at a regional, national or international conference of a related discipline (one credit hour);
- 12 credit hours of dissertation research comprised of a focused line of research over a three-to-four-year period of doctoral work.

Required research courses for the program (nine credit hours) – both tracks:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 543 Statistical Methods I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 544 Statistical Methods II</td>
<td>3</td>
</tr>
<tr>
<td>ALHP 761 Health Related Sciences Research Design</td>
<td>3</td>
</tr>
</tbody>
</table>

(continued)

Approved research design alternatives:

- HADM 761 Health Services Research Methods I 3
- SOCY 602 Applications of Advanced Research Methods 3
- EDUS 710 Educational Research Design 3

Elective research courses for the program (three credit hours) – both tracks:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOS 531 Clinical Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 553-554 Applied Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 571 Clinical Trials</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 572 Statistical Analysis of Biomedical Data</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 655 Quantitative Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>ALHP 716 Grant Writing and Project Management in Health Related Sciences (or elective research course in consultation with adviser)</td>
<td>3</td>
</tr>
</tbody>
</table>

Required concentration courses for the Ph.D. program tracks


**Cardiopulmonary track**

- PHIS 512 Cardiovascular Exercise Physiology 3
- PHIS 604 Cell Physiology 4
- PHIS 612 Cardiovascular Physiology 3
- REMS/HEMS 601 Movement Physiology 3
- REMS/HEMS 610* Laboratory Techniques in Rehabilitation and Movement Science 3
- REMS/HEMS 675 Clinical Exercise Physiology 3

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**Neuromusculoskeletal dynamics track**

(select 18 credits from the following):

- REMS/HEMS 611 Biomechanics of Human Motion 3
- REMS/HEMS 660 Neuromuscular Performance 3
- REMS 665 Instrumentation in Motion Analysis 3
- PHTY 602 Advanced Biomechanics 3
- PHTY 605 Foundations of Pathokinesiology 3
- PHTY 606 Therapeutic Kinesiology 3
- PHTY 608 Advanced Musculoskeletal Sciences 3
- REMS/HEMS 692 Independent Study or elective course 3

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**Laboratory rotations** (three credit hours) – both tracks:

- REMS 710 Research Techniques in Rehabilitation and Movement Science 1-3

**Professional development core** (three credit hours) – both tracks

- REMS 690 Research Seminar in Rehabilitation and Movement Science 1
- REMS 793 Teaching Practicum in Higher Education 1
- REMS 794 Research Presentation Seminar 1

**Research in rehabilitation and movement science** (12 credit hours) – both tracks

- REMS 798 Research in Rehabilitation and Movement Science 12

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**Advisory committee**

**Adviser**

Incoming students will identify a faculty member in the program with whom they would like to pursue their academic program and research endeavors. Every effort will be made to accommodate the student’s first choice of a faculty adviser. If the student is unsure of a research interest and adviser selection, the Admissions Committee will assign an adviser. Within the first two semesters of attendance, a permanent adviser should be identified. The adviser, together with the student, will develop a plan of study for the student’s didactic and scholarly program and will be responsible for guiding the student’s academic progress such that the adviser will supervise the student’s research work and dissertation preparation.
Advisory committee

The student, in consultation with the adviser, will identify faculty members to serve on the advisory committee. The committee shall be appointed no later than the end of the spring semester following matriculation into the program. The student’s advisory committee shall be comprised of five faculty members to include the adviser, two members from the rehabilitation and movement science faculty and two faculty members from other related departments. The student’s adviser, who is active in the field of research the student has selected, will chair the committee.

Comprehensive examination

Once core courses are successfully completed, students must pass written and oral comprehensive examinations before transitioning to candidacy. These examinations will test students on their basic knowledge of rehabilitation and movement science principles (primarily in their chosen track) and research methods as obtained through core, research and elective courses of the curriculum. The student must demonstrate a firm grasp of the material and the potential to become an independent researcher.

The written exam will be given to students during their second spring semester in the program. The written exam will consist of an area paper pertinent to the student’s area of interest. The student’s adviser and advisory committee must approve the topic and an outline of the area paper. The student’s adviser is responsible for grading the area paper. If a student receives a less than satisfactory grade on the area paper, he/she will be afforded the opportunity to make appropriate revisions. Students will only be allowed to revise the area paper once. The area paper should be a minimum of 15 double-spaced pages in 12-point font. The area paper must be in a form suitable for submission for publication to a journal whose content addresses topics consistent with the area paper. The student’s adviser and advisory committee must approve the journal selection and manuscript prior to submission. A passing grade on the written exam is not contingent upon the manuscript being accepted for publication.

Following acceptance of the area paper, the student will write a research proposal. The structure of the proposal will follow federal grant submission guidelines such as those specified by the National Institutes of Health or the Centers for Disease Control. The analytical research proposal must be submitted to and approved by the student’s advisory committee prior to the oral examination.

The oral exam should be conducted within three to six months of successful completion of the written exam with the goal of proceeding to candidacy by the end of the fall semester of the student’s third year. The oral exam will be based on, but not primarily limited to, the student’s proposed analytical research project. The student must receive a satisfactory grade from each committee member to pass the oral exam. The student may proceed to candidacy and begin the research outline in the proposal once successful completion of the oral examination is achieved.

Exit requirements

Dissertation defense
Upon completion of all required course work and the research project, the student must prepare a dissertation to describe the research. A dissertation manual is available for download from the VCU Web site. Students are highly encouraged to become familiar with this manual and use it as a guide for preparation of their dissertation. All committee members must approve the written dissertation and the student must orally defend this dissertation in a publicly advertised seminar prior to graduation.

Students are expected to meet all university graduate school requirements regarding minimal GPA and limitation on credits achieved with a grade of “C” or below.

**Time to degree**

The doctoral degree must be obtained within seven years of matriculation. It is expected that full-time students will satisfy all requirements within four to five years. Part-time students may take the full seven years to complete all courses and the research project.
School of Education

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.

James H. McMillan
Department Chair
Department of Recreation, Parks and Sport Management

The Department of Recreation, Parks and Sport Management provides a professional core of courses leading to a Master of Science degree with one of three specializations: leisure service management, therapeutic recreation or sport leadership. Graduates from this program seek positions with government departments, nonprofit agencies, and commercial recreation and sport enterprises. Students who desire careers in improving the lives of others, developing and managing sport programs and facilities, meeting the needs of persons with disabilities, preserving and conserving natural resources, or creating leisure opportunities that provide a sense of satisfaction for participants, should review departmental program offerings.
School of Education

Master of Science in Recreation, Parks and Sport Leadership

Students may select one of three specialty areas: leisure service management, therapeutic recreation or sport leadership. Entry into the Sport Leadership specialty area requires admission to the VCU SportsCenter Program. For more information and to request a VCU SportsCenter application, contact the VCU SportsCenter at (804) 828-TEAM or visit the Web at http://www.vcu.edu/sportscenter.

Leisure service management is for students who want to expand their professional preparation for general administration and leadership in public or private leisure service organizations. Therapeutic recreation is for students seeking advanced study to prepare for careers in leadership and supervision of recreation programs for disabled persons in clinical, residential or community settings. In these programs of study, specialty courses and electives focus on either leisure service management or therapeutic recreation.

Leisure service management or therapeutic recreation

<table>
<thead>
<tr>
<th>Research core</th>
<th>credits</th>
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<tbody>
<tr>
<td>HEMS/RPSL 600 Research Methods in Health, Movement Sciences and Recreation (3)</td>
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<tr>
<td>HEMS/RPSL 602 Statistical Applications in Health, Movement Sciences and Recreation (3)</td>
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<tr>
<td>Choose one:</td>
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<tr>
<td>RPSL 797 Project Research (3)</td>
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<td>RPSL Thesis (3)</td>
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<td>Elective approved by adviser (3)</td>
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<tr>
<th>Program core</th>
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<tr>
<td>RPSL 601 Conceptual Foundations of Leisure (3)</td>
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<td>Choose one:</td>
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<tr>
<td>RPSL 606 Directed Readings (3)</td>
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<tr>
<td>RPSL 607 Field Instruction (3)</td>
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<tr>
<th>Specialty (choose one of the specialty areas)</th>
<th>6</th>
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</table>

Leisure Service Management

RPSL 609 Program Development and Management (3)
RPSL 610 Organization and Administration of Recreation and Parks Systems (3)
Therapeutic Recreation

RPSL 506 Contemporary Issues in Therapeutic Recreation (3)
RPSL 605 Program Development in Therapeutic Recreation (3)

Electives (course work in related disciplines is selected with the consent of the student’s adviser) 15

Sport leadership

The VCU SportsCenter offers structured graduate programs combining classroom theory with exposure to relevant field experiences. Through the sport leadership program, students will be prepared to assume the responsibilities for developing professional and amateur athletes, and managing sports programs in a variety of academic, public and private sectors. The interdisciplinary faculty and curriculum give students the opportunity to concentrate on areas most important to them and most relevant to the sports business.

The SportsCenter offers graduate courses online for those students who want to take advantage of the SportCenter’s educational opportunities via the Internet. Currently, three classes are available each semester.

For more information and to obtain an application for the sport leadership program, phone (804) 828-TEAM (8326), (877) 799-4287 (toll free), fax: (804) 828-7526 or visit the Web site at http://www.vcu.edu/sportcenter.

Credits

Required core 15
RPSL 603 Research (3)
RPSL 630 Sociology of Sport (3)
RPSL 632 Sports Business (3)
RPSL 634 Coaching and Administration (3)
RPSL 635 Leadership Models in Sports (3)

Selective courses 9-12
RPSL 594 Topical Seminar (1-3, maximum 6)
RPSL 604 Research Practicum (3)
RPSL 606 Directed Readings (3)
RPSL 609 Program Development and Management (3)
RPSL 631 Contemporary Issues (3)
RPSL 633 Sports Marketing (3)
RPSL 651 Topics in Recreation (1-3, maximum 9)

Field experiences 9-12
RPSL 607 Field Instruction (3)
RPSL 641 Independent Study (1-3)
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>RPSL 604</td>
<td>Research Practicum (3)</td>
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</tr>
<tr>
<td>RPSL 700</td>
<td>Externship (3-6)</td>
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</tr>
</tbody>
</table>

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School of Education

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.
The Master of Education in Special Education program prepares graduates for work in one of five areas: early childhood special education, emotional disturbance, learning disabilities, mental retardation or severe disabilities. Applicants who do not already hold a teaching license must meet both licensure and degree requirements prior to the awarding of the Master of Education degree unless exempted as a professional from another discipline. Students should plan carefully with their adviser to ensure that the appropriate courses and experiences are completed. Successful completion of the degree program leads to endorsement in early childhood special education, emotional disturbance, learning disabilities, mental retardation or severe disabilities.

**Early childhood special education program**

The Master of Education in Special Education program with a track in early childhood special education is a sequentially planned series of courses and clinical experiences designed to prepare individuals to work with young children, from birth through age five, with developmental disabilities and their families. Successful completion of the degree program qualifies students for teacher licensure with endorsement in early childhood special education by the Virginia Department of Education. Students are prepared to intervene with infants and young children representing a wide range of abilities, including those at risk for developmental delays and those at risk for severe disabilities. As a result of training, students will be prepared to fill a variety of early intervention roles. The program can be completed in five semesters of full-time study or six semesters of part-time study.

### Foundations

**Human development and learning** (3)
- EDUS 603 Seminar in Child Growth and Development

**Cultural, historical and philosophical** (3)
- (one of the following)
  - EDUS 601 Philosophy of Education
  - EDUS 608 History of Western Education
  - EDUS 610 Social Foundations of Education
  - EDUS 612 Education and the World’s Future
  - EDUS 614 Contemporary Educational Thought
  - EDUS 673 Seminar on Educational Issues, Ethics and Policy

| credits | 9 |
Research (3)
EDUS 660 Research Methods in Education

Program core

ECSE 601 Assessment of Infants and Young Children with Disabilities (3)
ECSE 602 Instructional Programming for Infants and Young Children with Disabilities (3)
ECSE 603 Program Management, Collaboration, and Service Coordination in Early Childhood Special Education (3)
TEDU 700 Externship (2 semesters; 3 credits each) (6)

Program track

With thesis
TEDU 798 Thesis (6)
Selectives (from following list) (15)

Without thesis
Selectives (from following list) (15)
Electives (from following list) (3)

Selectives

MNRT 500 Language/Communication Intervention for Young Children and Individuals with Severe Disabilities
TEDU 541 Infants and Young Children With Special Needs*
TEDU 542 Family/Professional Partnerships
TEDU 558 Educating Students with Multiple Disabilities
TEDU 561 Reading Foundations
TEDU 630 Trends in Special Education*
TEDU 631 Behavior Management of Students with Disabilities

* Students may not take both TEDU 541 and TEDU 630.

Electives (3-6 credits as determined by adviser)
ADMS 632 Administration and Supervision of Special Education
IDDS 600 Interdisciplinary Studies in Developmental Disabilities: Teamwork in Serving Persons with Developmental Disabilities
MNRT 610 Teaching Strategies for Students with Severe Disabilities
SLWK 711 Strategies for Social Work Planning and Administrative Practice
TEDU 625 Young Child and the Curriculum
TEDU 651 Topics in Education: Current Issues in Early Childhood Education
TEDU 672 Internship

Emotional disturbance program
The Master of Education in Special Education with a specialization in emotional disturbance provides teachers the professional knowledge and skills needed to work in a variety of settings: general education classrooms (where children with special needs are being included), resource rooms, self-contained classrooms and residential programs. In developing teacher competencies the master's program focuses on specific skills and strategies for diagnosing and remediating behavior and learning problems of students with emotional disturbance. The educational and therapeutic interventions taught in the program are based on a number of theoretical models including behavioral, psychodynamic, ecological and psychoeducational. An emphasis of the program is on collaboration with parents, with professionals from other disciplines, and with other community agencies and programs.

Program course work builds on a strong foundation of knowledge in psychology, child development, research and education. Students receive in-depth training in how to identify students with emotional disturbances, how to diagnose individual needs, and how to plan and deliver individualized programs in a team setting. Special training is provided in the teaching of reading, behavior management and the use of interactive strategies teaching positive social skills. Graduates are prepared to work with students in completing a variety of transitions, such as from special education to the general education classroom or from high school to employment and independent living.

The program offers a variety of placement opportunities for practicum and externship experiences, including a range of public and private schools and mental health programs in the Richmond area that allow graduate students to select field experiences that are consistent with their professional goals. Previous teaching experience is valued, but not required. Students without previous teaching experience must complete a practicum in addition to the externship. When students complete the program, they are eligible for licensure by the Virginia Department of Education with an endorsement to teach students with emotional disturbance in grades K-12. Students are offered the option of taking a full-time externship for one semester, a half-time externship for each of two semesters or an on-the-job externship for the duration of one academic year following one year of successful teaching in that setting.

A personal interview with program faculty is required as a part of the admission process.

**Foundations**

**Human development and learning** (3)
(one of the following)
EDUS 602 Adolescent Growth and Development
EDUS 603 Seminar in Child Growth and Development
EDUS 604 Adult Development
EDUS 607/PSYC 607 Advanced Educational Psychology
EDUS 609 Learning Theories in Education

**Cultural, historical, and philosophical** (3)
(one of the following)
EDUS 601 Philosophy of Education
EDUS 608 History of Western Education
EDUS 610 Social Foundations of Education
EDUS 612 Education and the World’s Future
EDUS 614 Contemporary Educational Thought
EDUS 673 Seminar on Educational Issues, Ethics and Policy

Research (3)
EDUS 660 Research Methods in Education

Special education core

Seld 530 Language Disabilities: Assessment and Teaching
TEDU 533 Educational Assessment of Individuals with Exceptionalities
TEDU 566 Diagnosis and Remediation in Reading (Note: course has prerequisite.)
TEDU 630 Trends in Special Education
TEDU 631 Behavior Management of Students with Disabilities
TEDU 632 Secondary Programming for Students with Disabilities

Specialization core

EMOD 500 Characteristics of Students with Emotional Disturbance (3)
EMOD 501 Teaching Students with Emotional Disturbance (3)
EMOD 603 Interactive Strategies in Teaching Students with Special Needs (3)
TEDU 700 Externship (6)

Learning disabilities program

The Master of Education in Special Education with a specialization in learning disabilities develops and refines the competencies needed for work with persons with learning disabilities in collaborative resource and self-contained settings at all levels, as well as in a variety of cultural environments. Students enrolling in the program will be required to complete two semesters of externship during the regular academic year and may be required to complete additional fieldwork activities and/or credits. Students in bachelor’s degree or extended programs who are planning to enroll are encouraged to consult with program faculty for assistance in selecting elective courses that provide a sound foundation and may reduce the number of additional courses necessary for certification.

Program course work encompasses broad concepts of education, research, development, related disciplines and special education to build a foundation of professional knowledge and understanding. Specialized courses develop the intensive diagnostic, remedial, decision-making and consultative skills and understandings required of a professional in learning disabilities, including the ability to recognize educational and social problems, to formulate effective individualized instructional interventions using a variety of methodologies and modifications, to incorporate accommodations and transitions into program plans, and to consult productively with
appropriate personnel in the development of maximum educational opportunities for students with learning disabilities.

Applicants who hold a bachelor’s degree in non-education or non-special education majors must complete a review process with program faculty as part of the admission process.

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<tr>
<th>Credits</th>
<th>Foundation Courses</th>
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<tbody>
<tr>
<td>9</td>
<td>Human development and learning (3)</td>
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<tr>
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<td>(one of the following)</td>
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<tr>
<td></td>
<td>EDUS 602 Adolescent Growth and Development</td>
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<td>EDUS 603 Seminar in Child Growth and Development</td>
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<td>EDUS 607/PSYC 607 Advanced Educational Psychology</td>
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<td>EDUS 609 Learning Theories in Education</td>
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<td></td>
<td>Cultural, historical and philosophical (3)</td>
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<td>(one of the following)</td>
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<td></td>
<td>EDUS 601 Philosophy of Education</td>
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<td>EDUS 608 History of Western Education</td>
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<td>EDUS 610 Social Foundations of Education</td>
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<td>EDUS 614 Contemporary Educational Thought</td>
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<td>Research (3)</td>
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<td></td>
<td>EDUS 660 Research Methods in Education</td>
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<tr>
<td></td>
<td>TEDU 630 Trends in Special Education</td>
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<td></td>
<td>TEDU 631 Behavior Management of Students with Disabilities</td>
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<td></td>
<td>TEDU 633 Educational Assessment of Individuals with Exceptionalities</td>
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<td></td>
<td>SELD 530 Language Disabilities: Assessment and Teaching</td>
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<th>Academic remediation elective (select one)</th>
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<tbody>
<tr>
<td>TEDU 566 Diagnosis and Remediation in Reading</td>
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<td>TEDU 569 Diagnosis and Remediation in Mathematics</td>
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<tr>
<th>Career/vocational elective (select one)</th>
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<tr>
<td>EDUS 503 Guidance for Exceptional Children</td>
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<tr>
<td>RHAB 611 Individual Counseling Approaches in Rehabilitation</td>
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<td>RHAB 623 Occupational Information, Analysis and Placement</td>
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<th>Specialization core</th>
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<tr>
<td>SELD 600 Characteristics of Persons with Learning Disabilities</td>
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<tr>
<td>SELD 601 Methods of Clinical Teaching</td>
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<tr>
<td>TEDU 700 Externship (Optional) (6)</td>
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Mental retardation program

Graduates of the Master of Education in Special Education with a specialization in mental retardation may fill roles as resource room, modified resource room, or self-contained classroom teachers in varied urban, suburban or rural areas. Some graduates are employed in residential programs for individuals with mental retardation or in programs in community or state department settings. The commonwealth of Virginia licenses their employment in public or private settings serving students from kindergarten through secondary school age.

The course of study includes a minimum of 42 credits designed around three components: foundations, special education core and specialization in mental retardation. The foundations component is comprised of nine semester hours that focus on three distinct content areas: human development and learning, cultural, philosophical and historical foundations, and research and evaluation methods. The special education core of 18 semester hours focuses on a curriculum that is rooted in special education for individuals with mental retardation as well as other disabilities. The specialization in mental retardation is comprised of 15 semester hours that focus on the development of specific advanced competencies for filling the varying roles of professionals in mental retardation. With previous licensure in mental retardation, the program will require approximately one year of full-time study for completion. Students seeking initial licensure should consider the Master of Teaching, which is designed for that purpose.

**Foundations**

**Human development and learning** (3)
(one of the following)
EDUS 602 Adolescent Growth and Development
EDUS 603 Seminar in Child Growth and Development
EDUS 604 Adult Development
EDUS 607/PSYC 607 Advanced Educational Psychology
EDUS 609 Learning Theories in Education

**Cultural, historical and philosophical** (3)
(one of the following)
EDUS 601 Philosophy of Education
EDUS 608 History of Western Education
EDUS 610 Social Foundations of Education
EDUS 612 Education and the World’s Future
EDUS 614 Contemporary Educational Thought
EDUS 673 Seminar on Educational Issues, Ethics and Policy

**Research** (3)
EDUS 660 Research Methods in Education

**Special education core**

18 credits
**Specialization core**

MNRT 556 Introduction to Mental Retardation (3)
MNRT 560 Curriculum Design for Students with Mental Retardation (3)
TEDU 566 Diagnosis and Remediation in Reading (3)
TEDU 700 Externship (6)

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**Severe disabilities program**

The severe disabilities program is designed to prepare teachers to work with students, ages 5 to 21, in public school settings. Throughout the program, emphasis is placed on person-centered planning, school and community inclusion, transdisciplinary teamwork, and the role of the family. Courses address physical and medical management issues, functional assessment strategies, longitudinal curriculum planning, systematic instruction, augmentative and alternative communication systems, assistive technology, transition from school to adulthood, positive behavioral supports, and the special needs of students with autism or physical, sensory and health-related disabilities.

Students enrolled in the program complete a field-based externship in their school (if they currently serve students with severe disabilities) or in one of the many public schools in the Richmond area. The externship is designed to meet the student’s needs for professional development and is generally completed toward the end of the master’s program.

Successful completion of the 42 credit hour program results in Virginia endorsement in severe disabilities, in addition to the Master of Education degree.

**Foundations**

**Human development and learning** (3)
(one of the following)
EDUS 602 Adolescent Growth and Development
EDUS 603 Seminar in Child Growth and Development
EDUS 607/PSYC 607 Advanced Educational Psychology
EDUS 609 Learning Theories in Education
**Cultural, historical and philosophical** (3)
(one of the following)
EDUS 601 Philosophy of Education
EDUS 608 History of Western Education
EDUS 610 Social Foundations of Education
EDUS 612 Education and the World’s Future
EDUS 614 Contemporary Educational Thought
EDUS 673 Seminar on Educational Issues, Ethics and Policy

**Research** (3)
EDUS 660 Research Methods in Education

**Special education core**

- ADMS 632 Administration and Supervision of Special Education
- TEDU 542 Family/Professional Partnerships
- TEDU 631 Behavior Management of Students with Disabilities
- TEDU 632 Secondary Programming for Students with Disabilities
- Selective:
  - IDDS 600 Interdisciplinary Studies in Developmental Disabilities: Teamwork in Serving Persons with Developmental Disabilities or a course of the student’s choice with adviser’s permission

**Specialization core**

- TEDU 558 Educating Students with Multiple Disabilities (3)
- TEDU 700 Externship (6)
- MNRT 500 Language/Communication Intervention for Young Children and Individuals with Severe Disabilities (3)
- MNRT 610 Teaching Strategies for Students with Severe Disabilities (3)
- MNRT 602 Assessment and Curriculum Development for Students with Severe Disabilities (3)

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Virginia Commonwealth University
Graduate Programs: Graduate School
Professional Programs: Vice President for Health Sciences
Updated: August 22, 2004
The Master of Teaching programs are designed to incorporate eligibility for initial teaching licensure in Virginia in early childhood/elementary, middle, secondary (biology, chemistry, English, French, German, history, history and social studies, mathematics, physics, science, Spanish) or special education (dual endorsement in emotional disturbance and mental retardation). Note: Individuals seeking initial licensure in early childhood special education or severe disabilities should refer to the Master of Education in Special Education listing.

The approved programs include undergraduate qualifying courses as well. Individuals pursuing the extended program are awarded undergraduate and graduate degrees simultaneously; baccalaureate degree recipients who meet the admission criteria also may pursue the Master of Teaching degree program, including the qualifying courses.

**Admission criteria**

Admission criteria for holders of baccalaureate degrees are the same as for the extended program, including admission to teacher preparation.

**Liberal arts requirements**

Additionally, individuals pursuing licensure must have a liberal arts degree, as defined by VCU, germane to what they propose to teach: for secondary, a major in the subject to be taught; for middle, a major in one of the subjects traditionally taught in middle grades (English, mathematics, history and social studies, or a science); for early childhood/elementary or special education, a major in one of the content areas typically taught (mathematics, a science, English, history or a social science) is particularly appropriate, but majors in other liberal arts areas are acceptable.

Individuals who do not hold such a degree may satisfy it as follows:

- for middle or secondary education, the required and, as appropriate, cognate courses in the pertinent academic major.
- for early childhood/elementary or special education, a liberal arts equivalency totaling at least 70 arts and sciences semester credits and consisting of no less than six hours in English (including composition), six hours in mathematics and statistics, three hours in human behavior and institutions, 12 hours in humanities, and seven to 12 hours in science (early childhood/elementary requires 12 credits with at least one laboratory course in a life science and another laboratory course in a physical science; special education requires seven credits with at least one laboratory course); and the remaining
31 credits (early childhood/elementary) or 36 credits (special education) from courses in literature, history, art or music history, foreign languages, philosophy and religious studies, African American studies, anthropology, economics, geography, international studies, political science, psychology, sociology, urban studies, women’s studies, or classical studies.

Additional information about the liberal arts requirements for early childhood/elementary, middle, secondary and special education is listed under the pertinent program in the Department of Teaching and Learning section of the Undergraduate Bulletin.

See the Undergraduate Bulletin for detailed information on the requirements of the various baccalaureate degrees in the College of Humanities and Sciences.

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. Students must be admitted to teacher preparation before enrolling in any clinical course, including practica and corequisites to clinical courses.

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. Individuals preparing to be teachers are advised to examine the SOLs for the grade levels and content areas they plan to teach. The content and concepts associated with one or more SOLs may be incorporated in 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.

Special education, K-12

The Master of Teaching in Special Education program leads to dual endorsement in two of these three special education areas: emotional disturbance, learning disabilities or mental retardation.

The professional sequence in the Master of Teaching in Special Education program is designed to
develop competencies needed to work with children and youth in two of these areas of special education in kindergarten through 12th grade. (All courses listed below are three credits unless otherwise indicated.)

**Required courses**

<table>
<thead>
<tr>
<th>Undergraduate</th>
<th>30</th>
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<tbody>
<tr>
<td>EDUS 300 Foundations of Education</td>
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<tr>
<td>EDUS 301 Human Development and Learning or PSYC 305 Educational Psychology</td>
<td></td>
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<tr>
<td>TEDU 330 Survey of Special Education</td>
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<tr>
<td>TEDU 426 Teaching Reading and Other Language Arts</td>
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<thead>
<tr>
<th>Graduate</th>
<th>9</th>
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<tbody>
<tr>
<td>TEDU 521 Teaching Mathematics for Middle Education or TEDU 522 Teaching Mathematics for Elementary Education</td>
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<tr>
<td>TEDU 531 Collaborative/Consultation Skills for Working with Families and Professionals</td>
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<tr>
<td>TEDU 533 Educational Assessment of Individuals with Exceptionalities</td>
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<tr>
<td>SELD 530 Language Disabilities: Assessment and Teaching or MNRT 500 Language Intervention for Young Children and Learners with Severe Disabilities</td>
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<tr>
<td>TEDU 631 Behavior Management of Students with Disabilities</td>
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<tr>
<td>TEDU 632 Secondary Programming for Students with Disabilities</td>
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</tbody>
</table>

**Selectives**

| Social/cultural foundations selective |  |
| (choose one from the following list) | |
| EDUS 601 Philosophy of Education | |
| EDUS 608 History of Western Education | |
| EDUS 610 Social Foundations of Education | |
| EDUS 612 Education and the World’s Future | |
| EDUS 614 Contemporary Educational Thought | |
| EDUS 673 Seminar on Educational Issues, Ethics and Policy | |

| Educational/psychological foundations selective |  |
| (choose one from the following list) | |
| Non-psychology majors must take: EDUS/PSYC 607 Advanced Educational Psychology | |
| Psychology majors may select one of the following: EDUS 602 Adolescent Growth and Development | |
| EDUS 603 Seminar in Child Growth and Development | |
| EDUS/PSYC 607 Advanced Educational Psychology | |
| EDUS 609 Learning Theories in Education | |
Option: With adviser’s permission, students with a strong background in educational psychology and/or child development may select EDUS 660 Research Methods in Education.

**Graduate or undergraduate selective**
This one selective is a course at the 600-level or below chosen from the following list:
- TEDU 542 Parent/Professional Partnership
- A second language course
- A second reading course
- A course in the third special education area (emotional disturbance, learning disabilities or mental retardation)
- A course in early childhood special education (ESCE)
- A course in counselor education (CLED)
- A course in rehabilitation counseling (RHAB)
- A course approved by the program faculty

**Concentration courses**

(two of the following three special education areas)
12 semester credit hours in courses and
16 semester credit hours in clinical experiences

**Emotional disturbance**
- EMOD 400 Characteristics of Children/Adolescents with Emotional Disturbance
- EMOD 501 Teaching Students with Emotional Disturbance
  Clinical experience
  - TEDU 310 Practicum: Emotional Disturbance (2)
  - EMOD 672 Internship: Emotional Disturbance (6)

**Learning disabilities**
- TEDU 444 Introduction to Learning Disabilities
- SELD 501 Methods of Clinical Teaching
  Clinical experience
  - TEDU 310 Practicum: Learning Disabilities (2)
  - SELD 672 Internship: Learning Disabilities (6)

**Mental retardation**
- MNRT 400 Characteristics of Children and Youth with Mental Retardation
- MNRT 560 Curriculum Design for Students with Mental Retardation
  Clinical experience
  - TEDU 310 Practicum: Mental Retardation (2)
  - MNRT 672 Internship: Mental Retardation (6)

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* A minimum of 33 credit hours must be taken at the graduate level.
School of Education

Ph.D. in Education

The Ph.D. in Education Program is interdisciplinary in curriculum, design and management and serves a variety of special audiences. The program is organized into the following tracks.

Adult education and human resource development track

Designed primarily for personnel who will be responsible for the design and management of adult education and training functions in environments such as business and industry, county, state and federal agencies, and volunteer organizations. Emphasis is placed on leadership training for planning, developing, managing and evaluating training in adult and continuing education programs. The program of studies is highly individualized and is based on the student's professional goals, previous graduate courses and work experiences.

Educational leadership track

Designed primarily for line administrative personnel in public school units. Emphasis is placed on providing leadership training for superintendents, building principals and assistant principals.

Instructional leadership track

Designed primarily for staff administrative personnel in urban school units. Emphasis is placed on providing leadership training for curriculum specialty coordinators and elementary, secondary and post-secondary school department heads and supervisors.

Research and evaluation track

Designed primarily for individuals with responsibility for conducting research and evaluation projects in and for agencies and educational organizations, emphasis in this track is placed on developing proficiency in both quantitative and qualitative methods of inquiry, providing students with a breadth of methods to study varied educational and social research questions. Students may select a concentration in either research or evaluation.
Special education and disability leadership track

Designed primarily for individuals employed in leadership positions in the field of special education, emphasis in this track is placed on developing in-depth knowledge about topics as they pertain to personnel development, research, issues and policies in special education.

Urban services leadership track

Designed primarily for persons employed in leadership positions in the urban community requiring less traditionally delineated academic preparation, emphasis in this track is placed on providing leadership training for administrators of community agencies and community organizations.

Admission requirements

Applicants must have earned a master’s degree in an appropriate profession or discipline related to a specific curriculum track in this program. Preference will be given to applicants who occupy positions of organizational leadership and have responsibility (or demonstrate potential) for planning, administering, conducting and evaluating service programs.

The entrance requirements, described in the admission packet and entrance requirements section that follows, reflect the aims of the program to provide continued academic growth for practitioners. The entrance requirements consist of a series of indicators that serve to predict an applicant’s potential for successfully completing doctoral work. No indicator stands alone, and the program takes into account many facets beyond those traditionally considered. The program’s philosophy is one of seeking excellence through an admission process that realizes that many applicants are practicing professionals whose experience and achievements must be recognized.

Admission is highly competitive. Preference is given to qualified applicants who demonstrate serious purpose, scholastic excellence, superior preparation and appropriate experience for the program.

Application process

Admission decisions rest with a faculty admissions committee and are made only on the basis of a complete application packet. There is one admission period each year. To begin course work in the summer session or fall semester, the application packet must be completed by Jan. 15. It is possible to delay enrollment, but application packets will be reviewed only during the March admission period.

The Admissions Committee reviews all completed admission packets. After the initial review of the packets, applicants are interviewed by the appropriate faculty. Applicants also must provide a writing sample on a date scheduled by the Admissions Committee. After the interviews and writing samples are completed and evaluated, all applicants are notified by mail of the admission decision. An applicant usually will have attained a cumulative GPA of at least 3.4 on all graduate work attempted and above average scores on the Aptitude Section of the GRE. However, no one variable automatically determines an admission decision.
Admission packet and entrance requirements

Applicants for admission to the program must complete an admission packet, which includes the VCU Application for Graduate Study as well as supplementary essay materials. Admission packets are available from:

Graduate School
Virginia Commonwealth University
1001 Grove Ave.
Richmond, VA 23284-3051
(804) 828-6916

Office of Graduate Studies in Education
Virginia Commonwealth University
P.O. Box 842020
Richmond, VA 23284-2020
(804) 828-6530

The entrance requirements fall into the three following categories:

Academic criteria

- A completed VCU Graduate School Application form.
- Two official and up-to-date copies of all transcripts of the applicant’s undergraduate and graduate record indicating that the applicant has earned a master’s degree from an accredited college or university.
- Official and current scores (within the past five years) for the General Test of the GRE. Advanced test scores are not required but may be submitted. If applicants have taken the GRE more than five years prior to the year of expected admission, they must retake the examination. Older scores also may be submitted. The Admissions Committee will consider the time elapsed since last formal schooling, occupational success and leadership ability.

External criteria

- A professional resume indicating an applicant’s educational and career experience as well as evidence of leadership potential. This experience may come from professional, civic, religious, fraternal or advocacy organizations. The applicant must present evidence of sustained experience in planning, leading, administering or evaluating programs and personnel in varied positions that are related directly to a program track. The evidence might include dates of positions, job responsibilities, supervisor’s evaluations, publications and important knowledge that came from the position. Other appropriate evidence may include letters of recognition, awards and professional memberships.
- Completed forms from three references. The applicant must submit names, addresses and telephone numbers of three persons qualified and willing to rate the applicant’s intellectual and leadership ability. If the applicant has attended school within the last three years, at least one of the references should be academic. Each of these persons completes a form rating the
applicant in a number of personal and academic areas. Submission of these names constitutes permission to contact these persons by telephone anytime during the admission decision process.

In addition to these three names, the applicant should submit the name, address and telephone number of his or her current job supervisor. This person may be contacted by a representative of the Admissions Committee and informed of the full scope and requirements of the doctoral program. The supervisor is expected to support the applicant’s educational goals and be willing to provide release time for externship and other program-related activities.

**Self-expression**

The applicant is required to submit three written statements:

- Personal statement in which the applicant discusses his or her personal career goals and the manner in which this doctoral program enhances these goals, as well as what the applicant expects to contribute to the program.

- Educational goals statement in which the applicant states his or her educational goals and the manner in which this doctoral program will help the applicant achieve these goals.

- Work experience statement in which the applicant discusses his or her work experience, and previous and current leadership roles.

The applicant should treat these statements as a summary of goals and talents that go beyond and do not duplicate the other submitted materials.

The applicant is encouraged to check, in advance of the deadline date, the status of his or her application packet to ensure that all components are in the packet by the deadline. Inquiries should be made to the Office of Graduate Studies in Education. Incomplete packets will not be reviewed by the Admissions Committee.

**Delayed admission**

Anyone admitted for a particular year may request a delay of one year for entrance to the program. Normally this request will be granted. Individuals requiring a further delay will be required to reapply for admission. The request for delayed admission must be transmitted in writing to the director of the Office of Graduate Studies in Education and must state the reasons for the request and the date that the individual plans to begin the program.

**Transfer credit**

Ph.D. in Education program students may transfer up to nine credit hours into the program, including courses taken at VCU prior to being admitted to the program. Note that credits earned for one degree cannot be applied to another degree. The rules for transferring credit to this program are:

- Transfer credit requests will be considered only after the student has been awarded continuing doctoral status.
There are no substitutes for the foundation courses, externship or dissertation.

Each request for transfer credit must stipulate the program component to which it applies with attendant reasoning. Requests for transfer and substitution for a specific research or concentration course must include course syllabus, reading list, instructor’s name and any other pertinent material. Each request for transfer credit must be approved by the director of graduate studies in education and must be judged appropriate for the development of the student’s concentration or cognate area.

To be valid for application to the program, transfer credit must have been taken no more than seven years prior to completion of all program requirements for awarding the degree, including successful defense of the dissertation.

Students wishing exceptions to these transfer rules must petition the director of graduate studies in education through their advisers. Their recommendations may be reviewed by the Ph.D. in Education Policy Board for final action.

See the Graduate Studies at VCU section of this bulletin for further policies governing transfer credit.

Curriculum

There are six components of the program leading to the Doctor of Philosophy in Education:

- **Foundations component** (nine hours minimum). This component emphasizes theoretical and social issues in urban institutional development and changes that all leaders in urban service institutions must understand and respond to within their leadership positions.

- **Research component** (12 hours minimum). This component emphasizes the prerequisite skills essential to designing, conducting and interpreting research. It also provides the research, statistical and computer tools and resources necessary to produce research beneficial to the urban leader. Students are required to demonstrate competency in areas of research methodology and statistics appropriate to doctoral-level study prior to enrolling for courses in this component.

  An applicant’s level of research competence is considered prior to admission. Research-related prerequisites and/or corequisites may be established for individuals based on past academic and/or work experience.

- **Concentration component** (15 hours minimum). This component is designed to allow the student to pursue a series of courses that provide a specific focus and serve as the student’s primary discipline. These courses are expected to develop the in-depth knowledge and skills in an identifiable area that is congruent with the student’s current or projected career field. It is at this point in the program that the student pursues study in one of the following tracks:
  - adult education and human resource development
  - educational leadership
  - instructional leadership
  - research and evaluation
  - special education and disability leadership
  - urban services leadership

Students admitted to the adult education and training track without prior course work in adult education may be required to take one or two prerequisite courses: ADLT 601 The
Adult Learner and ADLT 603 Instructional Strategies for Adults.

- **Cognate component** (nine hours minimum). This component is designed to allow the student to pursue, through course work outside the primary discipline, a secondary field of study that complements the student’s concentration component.

- **Externship component** (three hours minimum). The semester externship refers to a minimum of 150 hours of on-site work experience designed to enhance the student’s program, career goals and professional development. The externship site is outside the setting in which the student is employed currently and ideally in a different, but related, career area in which the student has had no or limited prior work experience. It is expected that the student will develop an appreciation for the network of service delivery systems in the urban setting and acquire additional leadership skills to function more effectively within that network.

  Externships are developed jointly by the student and the student’s adviser and approved by the director of graduate studies. Students may begin the externship experience only after being awarded continuing doctoral status. The required 150 clock hours of the externship may be extended over two consecutive semesters, if appropriate.

- **Dissertation component** (nine hours minimum). This component consists of EDUS 890 Dissertation Seminar, three hours, and EDUS 899 Dissertation Research, six hours. EDUS 890 Dissertation Seminar is designed to aid the student in identifying the resources and refining the skills required to initiate, develop and complete a scholarly prospectus and dissertation. The remaining credit hours of EDUS 899 Dissertation Research are assigned to the scholarly pursuit and completion of the dissertation.

- **Restricted elective** (three hours minimum). To be taken in either the concentration, cognate, or dissertation component.

### Foundation component

- EDUS 701 Urban Education
- PHIL 713/PPAD 713 Ethics and Public Policy or PHIL 635 Philosophy of the Social Sciences
- SOCY 650 Theories of Social and Institutional Change

### Research component

- EDUS 710 Educational Research Design
- EDUS 711 Qualitative Methods and Analysis
- STAT/SOCY 608 Statistics for Social Research
- Three credit selective

### Concentration component

**Adult education and human resource development track**  
(select five of the following courses)

- ADLT 700 Technologically Mediated Adult Learning Systems
- ADLT 701 Advanced Program Planning in Adult Education and Human Resource Development
- ADLT 702 Seminar in Adult Learning Theories
- ADLT 703 The Adult Education and Human Resource Development Training Consultant
- ADLT 704 Groups, Teams and Organizational Learning
- ADLT 705 Global Human Resource Development
Educational leadership track
(recommended sequence)
ADMS 701 Development and Implementation of Administrative Policies in Education
ADMS 704 School Business Administration
ADMS 705 Planning Educational Facilities
ADMS 707 Advanced Educational Law
TEDU 617 Instructional Models

Instructional leadership track
(required sequence)
ADMS 701 Development and Implementation of Administrative Policies in Education
TEDU 617 Instructional Models
TEDU 730 Educational Staff Development
TEDU 731 Instructional Theories and Strategies
Elective

Research and evaluation track
(select five courses from the appropriate concentration)

Research concentration
EDUS 651 Topics in Education: Educational Research and Evaluation
MGMT 643 Applied Multivariate Methods
NURS 772 Advanced Qualitative Research Methods
PPAD 721 Survey of Applied Research Methods in Public Policy and Administration
PPAD 711 Seminar in Public Policy and Administration I
SOCY 605/PADM 605 Survey Research Methods
SOCY 623 Causal Analysis

Evaluation concentration
EDUS 651 Topics in Education
EDUS 661 Educational Evaluation: Models and Designs
EDUS 662 Educational Measurement and Evaluation
PPAD 627 Workshop in Policy Analysis and Evaluation
SOCY 605/PADM 605 Survey Research Methods

Special education and disability policy track
(required sequence)
TEDU 705 Seminar on Disability Policy
TEDU 706 Personnel Development in Special Education
TEDU 707 Critical Issues in Special Education
TEDU 708 Designing, Funding and Conducting Research in Special Education
TEDU 709 Directed Readings in Special Education

Urban services leadership track
Courses in career-relevant skills within an urban context with approval of adviser.

**Cognate component**

**Adult education and human resource development track**
The cognate component must be developed outside of the School of Education.

**Educational leadership track**
The concentration and cognate components combined must include at least nine credit hours outside of the School of Education.

**Instructional leadership track**
The cognate component must be developed outside of the School of Education.

**Research and evaluation track**
Students who choose the research concentration are required to complete an evaluation cognate. Students who choose the evaluation concentration must complete a research cognate. The concentration and cognate components combined must include at least nine credit hours outside of the School of Education.

**Special education and disability policy track**
The cognate component must be developed outside of the school of education.

**Urban services leadership track**
Either the concentration component or the cognate component, but not both, must be developed in the School of Education.

**Externship component**

**Dissertation component**
9
EDUS 890 Dissertation Seminar
EDUS 899 Dissertation Research

**Restricted elective**
3

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**60**

**Other Ph.D. in Education program requirements**

**Residency requirement**
Ph.D. in Education students are required to complete a minimum of 12 credit hours each calendar year, commencing with the first semester in which the student enrolls for course work.
Continuing doctoral status

At the completion of 15 credit hours (excluding prerequisite courses), Ph.D. in Education students are evaluated for continuing doctoral status by the director of graduate studies in education. To attain continuing doctoral status, the student must have attained a minimum cumulative GPA of 3.3.

Program planning

Ph.D. in Education students are required to submit a final plan of program study before the completion of the 27th credit hour of study.

Comprehensive examination

Ph.D. in Education students are required to pass a comprehensive examination at the completion of all course work (excluding the dissertation component). The examination is scheduled once each semester over a two-day period.
School of Education

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 division 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, and
- serving the community through technical assistance, workshops, consulting education activities, Professional Development Schools and other partnerships.

The Department of Teaching and Learning houses six degree and certificate granting programs.

Master of Education in Curriculum and Instruction
Master of Education in Reading
Master of Teaching

Leila Christenbury
Department Chair
M.Ed. in Curriculum and Instruction
M.Ed. in Reading
Master of Teaching
Post-baccalaureate Certificate in Teaching (Secondary)
Post-baccalaureate Certificate for Library/Media Specialist
Post-master's Certificate for Reading Specialist
Ph.D. in Education
Licensure and endorsement requirements

Individuals seeking initial teacher licensure must meet all liberal arts and sciences requirements of the program and they also must be admitted to teacher preparation. Applications for “Admission to Teacher Preparation” may be obtained from the Office of Academic Services.

Applicants for the Master of Education (M.Ed.) degree who do not already hold a valid professional teaching license should expect to complete additional course work and other experiences prior to the granting of the degree. Such candidates must submit passing scores on Praxis I as part of the admission to teacher preparation process. Students should plan carefully with their advisers to determine what additional undergraduate or graduate course work and experiences must be completed so that both degree and licensure requirements are met prior to awarding of the Master of Education degree.

The Department of Teaching and Learning offers the Master of Teaching degree in an Extended Teacher Preparation Program integrating undergraduate and graduate work and leading to the awarding of a baccalaureate degree from the College of Humanities and Sciences and the M.T. degree from the School of Education (see the Undergraduate Bulletin).

The Post-baccalaureate Certificate in Teaching (secondary education only) is designed for students with a bachelor’s degree in areas other than education or an advanced degree in some other field who wish to become teachers but do not seek a master’s degree. Students complete a minimum of 24 hours beyond the bachelor’s level in a program area. Interested individuals should consult the post-baccalaureate certificate section elsewhere in this chapter for information and currently recognized shortage areas. Candidates must submit passing scores on Praxis I as part of the admission to teacher preparation process.

The Post-master’s Certificate for Reading Specialist is designed for holders of master’s degrees who are already licensed as teachers and have at least three years of teaching experience. Students complete a minimum of 21 graduate credits beyond their master’s degree. Interested individuals should consult the post-master’s certificate section later in the teacher education description of programs.

The Post-baccalaureate Certificate for Library/Media Specialist is designed for individuals seeking endorsement as library/media specialists in Virginia. Students complete a minimum of 24 credits beyond their baccalaureate degree. Individuals interested in this endorsement should consult the post-baccalaureate section later in the teacher education description of programs.

Requirements for both initial licensure and added endorsements include taking and achieving state-established pass scores on the Praxis II specialty area tests.

Education as critically reflective practitioner
The guiding theme of programs in the Department of Teaching and Learning is “educator as critically reflective practitioner.” Courses and experiences provide opportunities for individuals to consider means of building on appropriate knowledge to make instructional and classroom decisions. (See section on this subject in the Undergraduate Bulletin for the Department of Teaching and Learning.)
The Master of Education in Curriculum and Instruction program is designed to provide professional and cognate experiences for veteran teachers. Individuals may select to concentrate in early childhood education, middle education, secondary education, gifted education, or library/media endorsement or instructional technology. Content courses within the program are selected in consultation with an adviser from the appropriate concentration.

**Foundations**

**Human development and learning** (3)
(one of the following)
EDUS 602 Adolescent Growth and Development
EDUS 603 Seminar in Child Growth and Development
EDUS 604 Adult Development
EDUS 607/PSYC 607 Advanced Educational Psychology
EDUS 609 Learning Theories in Education

**Cultural, historical and philosophical** (3)
(one of the following)
EDUS 601 Philosophy of Education
EDUS 608 History of Western Education
EDUS 610 Social Foundations of Education
EDUS 612 Education and the World’s Future
EDUS 614 Contemporary Educational Thought
EDUS 673 Seminar on Educational Issues, Ethics and Policy

**Research** (3)
EDUS 660 Research Methods in Education

**Process level**
TEDU 615 Curriculum Development
TEDU 617 Instructional Models

**Content level or area of focus**
TEDU 680 Externship Proposal Seminar
TEDU 700 Externship

Externships require a well-conceived proposal developed with an adviser and submitted the semester prior to the experience. Guidelines are in the program handbook, which may be obtained from the department office.
Master of Education in Reading

The Master of Education in Reading program is designed to provide experienced teachers who are prospective reading specialists with a program of sequential and integrated experiences in areas of the reading curriculum ranging from preschool to adult levels. Students will gain an understanding of the developmental and diagnostic processes involved in teaching reading and the language arts and will become familiar with the resource and supervisory functions, which are part of the specialist role. Prior to graduation, students must complete a reading portfolio documenting their work in the program and related work experiences. The M.Ed. in Reading is an approved program (K-12) for students who meet Virginia State Department of Education requirements. The reading specialist endorsement also requires completion of three years of teaching in a reading-related field.

A cooperative agreement has been established with Virginia State University to permit selected, qualified students to complete the M.Ed. in Reading Program. Up to 12 credit hours from an approved list may be transferred from the cooperating institution. Interested students should contact the Department of Teaching and Learning.

Foundations

**Human development and learning** (3)
(one of the following)
EDUS 602 Adolescent Growth and Development
EDUS 603 Seminar in Child Growth and Development
EDUS 604 Adult Development
EDUS 607/PSYC 607 Advanced Educational Psychology
EDUS 609 Learning Theories in Education

**Cultural, historical, and philosophical** (3)
(one of the following)
EDUS 601 Philosophy of Education
EDUS 608 History of Western Education
EDUS 610 Social Foundations of Education
EDUS 612 Education and the World’s Future
EDUS 614 Contemporary Educational Thought
EDUS 673 Seminar on Educational Issues, Ethics and Policy

**Research** (3)
EDUS 660 Research Methods in Education
Program
TEDU 561 Reading Foundations: Sociological/Psychological Perspectives
TEDU 562 Reading Instruction in the Content Areas
TEDU 672 Internship (in Reading)
READ 600 Analysis and Correction of Reading Problems
READ 605 Organizing and Implementing Reading Programs
Restricted elective
  TEDU 525 Teaching Language Arts
  TEDU 549 Diagnostic Reading in the Secondary School
  TEDU 552/ENGL 552 Teaching English as a Second Language
  READ 601 Psycholinguistics and Language Arts Curriculum
  READ 602 Teaching Reading to Adults
  TEDU 528 Children’s Literature II
  ENED 601 Young Adult Literature

Electives
Electives should be used to ensure state regulations for the endorsement are met.
The Master of Teaching programs are designed to incorporate eligibility for initial teaching licensure in Virginia in early childhood/elementary, middle, or secondary education (biology, chemistry, English, French, German, history, history and social studies, mathematics, physics, science, Spanish).

The approved programs include undergraduate qualifying courses as well. Individuals pursuing the extended program are awarded undergraduate and graduate degrees simultaneously; baccalaureate degree recipients who meet the admission criteria also may pursue the Master of Teaching degree program, including the qualifying courses.

**Admission criteria**

Admission criteria for holders of baccalaureate degrees are the same as for the extended program, including admission to teacher preparation.

**Liberal arts requirements**

Additionally, individuals pursuing licensure must have a liberal arts degree, as defined by VCU, germane to what they propose to teach: for secondary, a major in the subject to be taught; for middle, a major in one of the subjects traditionally taught in middle grades (English, mathematics, history and social studies, or a science); for early childhood/elementary or special education, a major in one of the content areas typically taught (mathematics, a science, English, history or a social science) is particularly appropriate, but majors in other liberal arts areas are acceptable.

Individuals who do not hold such a degree may satisfy it as follows:

- for middle or secondary education, the required and, as appropriate, cognate courses in the pertinent academic major.

- for early childhood/elementary, a liberal arts equivalency totaling at least 70 arts and sciences semester credits and consisting of no less than six hours in English (including composition), six hours in mathematics and statistics, three hours in human behavior and institutions, 12 hours in humanities, and 12 hours in science (with at least one laboratory course in a life science and another laboratory course in a physical science); and the remaining 31 credits from courses in literature, history, art or music history, foreign languages, philosophy and religious studies, African American studies, anthropology, economics, geography, international studies, political science, psychology, sociology, urban studies, women’s studies, or classical studies.

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.
See the Undergraduate Bulletin for detailed information on the requirements of the various baccalaureate degrees in the College of Humanities and Sciences.

**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. Students must be admitted to teacher preparation before enrolling in any clinical course, including practica and corequisites to clinical courses.

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 childhood/elementary education, P-6**

Consult with the appropriate professional studies adviser, for in addition to changes in professional studies there are liberal arts requirements. (Refer to the P-6 program in the Undergraduate Bulletin.)

**Professional studies requirements**

(60 credits)

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</tbody>
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EDUS 305/PSYC 305 Educational Psychology 3
HPEX 390 Physical Education for the Elementary Teacher 3
PSYC 301 Child Psychology 3
TEDU 310 Practicum I (with TEDU 414 and TEDU 426) 2
TEDU 310 Practicum II 2
TEDU 351/ENGL 351 Children’s Literature I 3
TEDU 414 Curriculum and Methods for Young Children 4
TEDU 426 Teaching Reading and Other Language Arts 3

Graduate credits
EDUS 673 Seminar on Educational Issues Ethics and Policy 3
TEDU 517 Science Education in the Elementary School 3
TEDU 522 Teaching Mathematics for Elementary Education 3
TEDU 566 Diagnosis and Remediation in Reading 3
TEDU 591 Social Studies Education in the Elementary School 3
TEDU 605 Theory and Practice of Educating Individuals with Special Needs 3
EDUS 607/PSYC 607 Advanced Educational Psychology 3
TEDU 626 Home-school Communication and Collaboration 3
TEDU 672 Internship I and II (K and grades 1-5 placements) 9

* All 500-level methods courses (TEDU 517, 522, 566, and 591) must have already been completed or taken concurrently with TEDU 310, Practicum II.
* At least 33 credit hours must be taken at the graduate level.

Middle education, 6-8

Consult with the appropriate professional studies adviser, for in addition to changes in professional studies there are liberal arts requirements. (Refer to the 6-8 program in the Undergraduate Bulletin.)

Professional studies requirements
(45 credits)

Undergraduate
EDUS 300 Foundations of Education 3
EDUS 301 Human Development and Learning 3
TEDU 310 Practicum A (concurrent with TEDU 544) 1
TEDU 310 Practicum B (concurrent with TEDU 521 or 540) 1
TEDU 310 Practicum C (concurrent with TEDU 550 or the course not taken with B) 1
TEDU 407 Educational Media: Utilization 3

12
Graduate
Choose two of the following 6
TEDU 521 Teaching Mathematics for Middle Education (3)
TEDU 540 Teaching Middle and High School Science (3)
TEDU 550 Teaching Interdisciplinary Language Arts and Social Studies in the Middle School (3)

Complete each of these courses
TEDU 544 Introduction to the Middle School 3
TEDU 562 Reading Instruction in the Content Areas 3
EDUS 607/PSYC 607 Advanced Educational Psychology 3
TEDU 672 Internship I and II 9
EDUS 673 Seminar on Educational Issues, Ethics and Policy 3
TEDU 681 Investigations and Trends in Teaching* 3

Graduate selective chosen from the following 3
TEDU 554/CMSC 554 Applications of Computers in the Teaching of Mathematics I
TEDU 556 Computer Applications in Education
TEDU 600 Organizing for Effective Classroom Instruction
TEDU 605 Theory and Practice of Educating Individuals with Special Needs
TEDU 626 Home-school Communication and Collaboration
EDUS 660 Research Methods in Education
ENED 601/ENGL 601 Young Adult Literature

__________________________
33

* Pertinent subject section (e.g., English, mathematics, science or social studies).

Secondary education, 6-12

The Master of Teaching with a concentration in secondary education leads to endorsement in one of these disciplines: biology, chemistry, economics, English, French, geography, German, history, mathematics, physics, political science, science, Spanish.

Qualifying courses (undergraduate)
EDUS 300 Foundations of Education
EDUS 301 Human Development and Learning
TEDU 310 Practicum (2 credits with TEDU 537, 1 credit with TEDU 540, 543, 545, 547 or 548)

Foundation courses 6
EDUS 607/PSYC 607 Advanced Educational Psychology
EDUS 673 Seminar on Educational Issues, Ethics and Policy

Concentration courses 9
TEDU 537 Secondary School Curriculum (3)
Choose discipline for licensure/endorsement sought (3)
TEDU 540 Teaching Middle and High School Sciences
TEDU 543 Teaching Secondary School Foreign Languages
TEDU 545 Teaching Secondary School Mathematics
TEDU 547 Teaching Secondary School Social Studies
TEDU 548 Teaching Secondary School English
TEDU 681 Investigations and Trends in Teaching

**Selectives**

Graduate selectives are to be chosen from the following:

1. Three credits from:

   Technology:
   TEDU 556 Computer Applications in Education
   TEDU 554/CMSC 554 Applications of Computers in the Teaching of Mathematics I

   Reading:
   TEDU 562 Reading Instruction in the Content Areas

   Classroom management:
   TEDU 600 Organizing for Effective Classroom Instruction
   TEDU 631 Behavior Management of Students with Disabilities

   Special education:
   TEDU 605 Theory and Practice of Educating Individuals with Special Needs

2. Six graduate credits from other courses in (1) above, from the academic major or from courses such as these:

   TEDU 521 Teaching Mathematics for Middle Education (required in math)
   TEDU 626 Home-school Communication and Collaboration
   ENED 601/ENGL 601 Young Adult Literature

   All selectives should be chosen in consultation with the professional studies adviser.

   Note: A minimum of 21 credits, including EDUS 300, EDUS 301, TEDU 310, TEDU 537, one of (TEDU 540, 543, 545, 547 or 548), EDUS 607 or 673 and the required selective (see 1 above), must be completed prior to the internship.

**Clinical experience**

TEDU 672 Internship

* At least 33 credit hours must be taken at the graduate level.
Post-baccalaureate Certificate in Teaching (Secondary)

The Post-baccalaureate Certificate in Teaching program is designed for students who have earned bachelor’s degrees in fields other than education, who wish to become teachers in secondary schools in one or more subjects and for whom a master’s degree is not a priority (applicants already may have earned a master's degree or wish to earn a master's degree in a specialized area of education later). Applicants must have a major or its equivalent in the subject they wish to teach.

Students are required to complete a minimum of 24 hours beyond the bachelor's level, including the courses listed below. Equivalent courses taken within the past five years may transfer; however, a minimum of 24 credit hours, including clinical experiences, must be taken at VCU after admission to the program.

Persons completing the program are expected, among other attributes, to have an understanding of human development and learning theory appropriate to the age group they will teach, to demonstrate knowledge of the subjects they will teach, to develop an understanding of purposes for education and a defensible philosophical approach toward teaching, to acquire awareness of the diversity of the school-age population in cultural background and styles of learning, to demonstrate an ability to plan and implement effective teaching, and to measure student learning in ways that lead to sustained development and learning.

Secondary education, 6-12

Qualifying courses

EDUS 300 Foundations of Education (3)
TEDU 310 Practicum (3)

Foundation courses

EDUS 602 Adolescent Growth and Development or
EDUS 607/PSYC 607 Advanced Educational Psychology
EDUS 673 Seminar on Education Issues, Ethics and Policy

Concentration courses

TEDU 537 Secondary School Curriculum
Choose discipline for which certification sought
   TEDU 540 Teaching Middle and High School Sciences
   TEDU 543 Teaching Secondary School Foreign Languages
TEDU 545 Teaching Secondary School Mathematics
TEDU 547 Teaching Secondary School Social Studies
TEDU 548 Teaching Secondary School English
TEDU 681 Investigation and Trends in Teaching

Clinical experience
TEDU 672 Internship

9

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School of Education

Post-baccalaureate Certificate for Library/Media Specialist

This certificate program is designed for individuals wishing to gain K-12 endorsement as a library/media specialist in the commonwealth of Virginia.

The School of Education offers two routes for certification as a school library/media specialist. One route is the M.Ed. in curriculum and instruction, with a focus area in school library/media. Another route is the post-baccalaureate certificate, which is comprised of course work leading to certification only.

All requirements for admission to graduate school apply to applicants for the Post-baccalaureate Certificate for Library/Media Specialist. All state department requirements for library/media specialist must be met. Students also must hold a valid Virginia teaching license before entering the program.

Students are required to complete a minimum of 24 graduate hours beyond their current baccalaureate degree, including the required courses listed below.

Persons completing the program are expected to demonstrate:

1. knowledge of current school library program practices; to include the areas of reference materials, cataloging, collection development and management, administration, organization of materials, budget management, and materials and hardware purchase,
2. skills in the operation of school-based technology; to include computing and telecommunication hardware and software, audio and video hardware and software, and other instructional technologies as appropriate,
3. ability to interpret school and district policy regarding such issues as copyright, fair use, censorship, etc., in accordance with policies adopted by their professional organizations,
4. ability to collaborate with teachers, librarians from all types of libraries and school administrators to ensure a viable school library program that provides access to information for all children, and
5. the ability to promote reading and literacy of all types.

Required courses

Library
TEDU 595 Reference and Bibliography 3
TEDU 596 Library Organization and Administration 3
TEDU 597 Cataloging and Classification 3
<table>
<thead>
<tr>
<th>Category</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>TEDU 507 Survey of Educational Media</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>TEDU 556 Computer Applications in Education</td>
<td>3</td>
</tr>
<tr>
<td>Literature</td>
<td>TEDU 528 Children’s Literature II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENED 601 Young Adult Literature</td>
<td>3</td>
</tr>
<tr>
<td>Clinical</td>
<td>TEDU 672 Internship</td>
<td>3</td>
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<td><strong>24</strong></td>
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</tbody>
</table>
The certificate program is offered for individuals who aspire to become reading specialists. Applicants for the certificate program must hold a master’s degree in any specialty area related to education.

The certificate program is designed for students who wish to gain state licensure as a reading specialist in kindergarten through high school settings. Applicants are required to have at least three years of teaching experience in a reading-related field setting if they want to be recommended to the Department of Education for endorsement as a reading specialist in Virginia.

All requirements for admission to graduate school apply to applicants for the Post-master’s Certificate for Reading Specialist. All state department requirements for reading specialist (specifically the 12 hours of graduate or undergraduate work in selected areas) must be met.

Students are required to earn a minimum of 21 graduate hours beyond their current master’s degree, including the required reading courses and an approved reading selective. Advisers will recommend selective courses based upon student experience and goals.

Persons completing the program are expected to demonstrate:

- an understanding of the reading language learning process,
- the ability to critique, adapt and model use of a variety of reading instructional strategies, methods and programs,
- expertise in developing and providing for continuous assessment of an individual and groups,
- ability to implement school-wide developmental, creative and intervention reading/language arts programs, and
- ability to understand and apply theory to practice within a variety of cultural contexts.

### Required content courses

- TEDU 561 Reading Foundations: Sociological/Psychological Perspectives 3
- TEDU 562 Reading Instruction in the Content Areas 3
- READ 600 Analysis and Correction of Reading Problems 3
- READ 605 Organizing and Implementing Reading Programs 3
- TEDU 672 Internship in Reading 3
Approved literacy selective (select two of the following) 6
  TEDU 525 Teaching Language Arts (3)
  TEDU 528/ENGL 528 Children's Literature II (3)
  TEDU 549 Diagnostic Reading in the Secondary School (3)
  TEDU 552/ENGL 552 Teaching English as a Second Language (3)
  READ 602 Teaching Reading to Adults (3)
  READ 601 Psycholinguistics and the Language Arts Curriculum (3)
  TEDU 681 Investigations and Trends in Teaching and
  ENGL 651 Topics in Teaching Composition: Capital Writing
  Project (6)
  TEDU 500 Workshops in Education: Topics in Literacy (to be
  designated) (3)

Electives should be used to ensure state regulations for the endorsement are met.

**Added or add-on endorsements Teaching English as a Second Language**

This program leads to an added endorsement, meaning an individual must already be licensed to

  teach in one or more areas of elementary, middle, secondary, special education or be certified in
  another teaching area.

**Foreign language**

credits 12 plus

**Linguistics (choose two)**

  ENGL/LING 449 Introduction to Linguistics
  ENGL/LING 450 Modern Grammar
  ENGL/LING 451 History of the English Language
  ENGL/LING 452 Language and Gender
  ENGL/LING 453 Studies in Linguistics
  ENGL/LING 454 Cross-cultural Communication

**Applied Linguistics**

  ENED/ENGL 532 Applied Linguistics
  SPAN/LANG 316 Spanish Linguistics

**Teaching**

  ENGL/TEDU 552 Teaching English as a Second Language

Choose one from:

  TEDU 562 Teaching Reading in the Content Areas
  TEDU 561 Reading Foundations
  READ 602 Teaching Reading to Adults

**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 105 and 105L Physical Geology
- GEOG/ENVS 335 and 335L Environmental Geology
- GEOG/ENVS 411 Oceanography
- GEOG/ENVS 401 Meteorology and Climatology
- 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

Ph.D. in Education

The Ph.D. in Education Program is interdisciplinary in curriculum, design and management and serves a variety of special audiences. The program is organized into the following tracks.

Adult education and human resource development track

Designed primarily for personnel who will be responsible for the design and management of adult education and training functions in environments such as business and industry, county, state and federal agencies, and volunteer organizations. Emphasis is placed on leadership training for planning, developing, managing and evaluating training in adult and continuing education programs. The program of studies is highly individualized and is based on the student’s professional goals, previous graduate courses and work experiences.

Educational leadership track

Designed primarily for line administrative personnel in public school units. Emphasis is placed on providing leadership training for superintendents, building principals and assistant principals.

Instructional leadership track

Designed primarily for staff administrative personnel in urban school units. Emphasis is placed on providing leadership training for curriculum specialty coordinators and elementary, secondary and post-secondary school department heads and supervisors.

Research and evaluation track

Designed primarily for individuals with responsibility for conducting research and evaluation projects in and for agencies and educational organizations, emphasis in this track is placed on developing proficiency in both quantitative and qualitative methods of inquiry, providing students with a breadth of methods to study varied educational and social research questions. Students may select a concentration in either research or evaluation.
Special education and disability leadership track

Designed primarily for individuals employed in leadership positions in the field of special education, emphasis in this track is placed on developing in-depth knowledge about topics as they pertain to personnel development, research, issues and policies in special education.

Urban services leadership track

Designed primarily for persons employed in leadership positions in the urban community requiring less traditionally delineated academic preparation, emphasis in this track is placed on providing leadership training for administrators of community agencies and community organizations.

Admission requirements

Applicants must have earned a master’s degree in an appropriate profession or discipline related to a specific curriculum track in this program. Preference will be given to applicants who occupy positions of organizational leadership and have responsibility (or demonstrate potential) for planning, administering, conducting and evaluating service programs.

The entrance requirements, described in the admission packet and entrance requirements section that follows, reflect the aims of the program to provide continued academic growth for practitioners. The entrance requirements consist of a series of indicators that serve to predict an applicant’s potential for successfully completing doctoral work. No indicator stands alone, and the program takes into account many facets beyond those traditionally considered. The program’s philosophy is one of seeking excellence through an admission process that realizes that many applicants are practicing professionals whose experience and achievements must be recognized.

Admission is highly competitive. Preference is given to qualified applicants who demonstrate serious purpose, scholastic excellence, superior preparation and appropriate experience for the program.

Application process

Admission decisions rest with a faculty admissions committee and are made only on the basis of a complete application packet. There is one admission period each year. To begin course work in the summer session or fall semester, the application packet must be completed by Jan. 15. It is possible to delay enrollment, but application packets will be reviewed only during the March admission period.

The Admissions Committee reviews all completed admission packets. After the initial review of the packets, applicants are interviewed by the appropriate faculty. Applicants also must provide a writing sample on a date scheduled by the Admissions Committee. After the interviews and writing samples are completed and evaluated, all applicants are notified by mail of the admission decision. An applicant usually will have attained a cumulative GPA of at least 3.4 on all graduate work attempted and above average scores on the Aptitude Section of the GRE. However, no one variable automatically determines an admission decision.
Admission packet and entrance requirements

Applicants for admission to the program must complete an admission packet, which includes the VCU Application for Graduate Study as well as supplementary essay materials. Admission packets are available from:

Graduate School
Virginia Commonwealth University
1001 Grove Ave.
Richmond, VA 23284-3051
(804) 828-6916

Office of Graduate Studies in Education
Virginia Commonwealth University
P.O. Box 842020
Richmond, VA 23284-2020
(804) 828-6530

The entrance requirements fall into the three following categories:

Academic criteria

- A completed VCU Graduate School Application form.
- Two official and up-to-date copies of all transcripts of the applicant’s undergraduate and graduate record indicating that the applicant has earned a master’s degree from an accredited college or university.
- Official and current scores (within the past five years) for the General Test of the GRE. Advanced test scores are not required but may be submitted. If applicants have taken the GRE more than five years prior to the year of expected admission, they must retake the examination. Older scores also may be submitted. The Admissions Committee will consider the time elapsed since last formal schooling, occupational success and leadership ability.

External criteria

- A professional resume indicating an applicant’s educational and career experience as well as evidence of leadership potential. This experience may come from professional, civic, religious, fraternal or advocacy organizations. The applicant must present evidence of sustained experience in planning, leading, administering or evaluating programs and personnel in varied positions that are related directly to a program track. The evidence might include dates of positions, job responsibilities, supervisor’s evaluations, publications and important knowledge that came from the position. Other appropriate evidence may include letters of recognition, awards and professional memberships.
- Completed forms from three references. The applicant must submit names, addresses and telephone numbers of three persons qualified and willing to rate the applicant’s intellectual and leadership ability. If the applicant has attended school within the last three years, at least one of the references should be academic. Each of these persons completes a form rating the
applicant in a number of personal and academic areas. Submission of these names constitutes permission to contact these persons by telephone anytime during the admission decision process.

In addition to these three names, the applicant should submit the name, address and telephone number of his or her current job supervisor. This person may be contacted by a representative of the Admissions Committee and informed of the full scope and requirements of the doctoral program. The supervisor is expected to support the applicant’s educational goals and be willing to provide release time for externship and other program-related activities.

Self-expression

The applicant is required to submit three written statements:

- Personal statement in which the applicant discusses his or her personal career goals and the manner in which this doctoral program enhances these goals, as well as what the applicant expects to contribute to the program.

- Educational goals statement in which the applicant states his or her educational goals and the manner in which this doctoral program will help the applicant achieve these goals.

- Work experience statement in which the applicant discusses his or her work experience, and previous and current leadership roles.

The applicant should treat these statements as a summary of goals and talents that go beyond and do not duplicate the other submitted materials.

The applicant is encouraged to check, in advance of the deadline date, the status of his or her application packet to ensure that all components are in the packet by the deadline. Inquiries should be made to the Office of Graduate Studies in Education. Incomplete packets will not be reviewed by the Admissions Committee.

Delayed admission

Anyone admitted for a particular year may request a delay of one year for entrance to the program. Normally this request will be granted. Individuals requiring a further delay will be required to reapply for admission. The request for delayed admission must be transmitted in writing to the director of the Office of Graduate Studies in Education and must state the reasons for the request and the date that the individual plans to begin the program.

Transfer credit

Ph.D. in Education program students may transfer up to nine credit hours into the program, including courses taken at VCU prior to being admitted to the program. Note that credits earned for one degree cannot be applied to another degree. The rules for transferring credit to this program are:

- Transfer credit requests will be considered only after the student has been awarded continuing doctoral status.
● There are no substitutes for the foundation courses, externship or dissertation.

● Each request for transfer credit must stipulate the program component to which it applies with attendant reasoning. Requests for transfer and substitution for a specific research or concentration course must include course syllabus, reading list, instructor’s name and any other pertinent material. Each request for transfer credit must be approved by the director of graduate studies in education and must be judged appropriate for the development of the student’s concentration or cognate area.

● To be valid for application to the program, transfer credit must have been taken no more than seven years prior to completion of all program requirements for awarding the degree, including successful defense of the dissertation.

Students wishing exceptions to these transfer rules must petition the director of graduate studies in education through their advisers. Their recommendations may be reviewed by the Ph.D. in Education Policy Board for final action.

See the Graduate Studies at VCU section of this bulletin for further policies governing transfer credit.

Curriculum

There are six components of the program leading to the Doctor of Philosophy in Education:

● **Foundations component** (nine hours minimum). This component emphasizes theoretical and social issues in urban institutional development and changes that all leaders in urban service institutions must understand and respond to within their leadership positions.

● **Research component** (12 hours minimum). This component emphasizes the prerequisite skills essential to designing, conducting and interpreting research. It also provides the research, statistical and computer tools and resources necessary to produce research beneficial to the urban leader. Students are required to demonstrate competency in areas of research methodology and statistics appropriate to doctoral-level study prior to enrolling for courses in this component.

An applicant’s level of research competence is considered prior to admission. Research-related prerequisites and/or corequisites may be established for individuals based on past academic and/or work experience.

● **Concentration component** (15 hours minimum). This component is designed to allow the student to pursue a series of courses that provide a specific focus and serve as the student’s primary discipline. These courses are expected to develop the in-depth knowledge and skills in an identifiable area that is congruent with the student’s current or projected career field. It is at this point in the program that the student pursues study in one of the following tracks:

  ○ adult education and human resource development

  ○ educational leadership

  ○ instructional leadership

  ○ research and evaluation

  ○ special education and disability leadership

  ○ urban services leadership

Students admitted to the Adult Education and Training track without prior course work in adult education may be required to take one or two prerequisite courses: ADLT 601 The
Adult Learner and ADLT 603 Instructional Strategies for Adults.

- **Cognate component** (nine hours minimum). This component is designed to allow the student to pursue, through course work outside the primary discipline, a secondary field of study that complements the student’s concentration component.

- **Externship component** (three hours minimum). The semester externship refers to a minimum of 150 hours of on-site work experience designed to enhance the student’s program, career goals and professional development. The externship site is outside the setting in which the student is employed currently and ideally in a different, but related, career area in which the student has had no or limited prior work experience. It is expected that the student will develop an appreciation for the network of service delivery systems in the urban setting and acquire additional leadership skills to function more effectively within that network.

Externships are developed jointly by the student and the student’s adviser and approved by the director of graduate studies. Students may begin the externship experience only after being awarded continuing doctoral status. The required 150 clock hours of the externship may be extended over two consecutive semesters, if appropriate.

- **Dissertation component** (nine hours minimum). This component consists of EDUS 890 Dissertation Seminar, three hours, and EDUS 899 Dissertation Research, six hours. EDUS 890 Dissertation Seminar is designed to aid the student in identifying the resources and refining the skills required to initiate, develop and complete a scholarly prospectus and dissertation. The remaining credit hours of EDUS 899 Dissertation Research are assigned to the scholarly pursuit and completion of the dissertation.

- **Restricted elective** (three hours minimum). To be taken in either the concentration, cognate, or dissertation component.

### Foundation component

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<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDUS 701 Urban Education</td>
<td>9</td>
</tr>
<tr>
<td>PHIL 713/PPAD 713 Ethics and Public Policy or PHIL 635 Philosophy of the Social Sciences</td>
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<tr>
<td>SOCY 650 Theories of Social and Institutional Change</td>
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</table>

### Research component

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<td>EDUS 710 Educational Research Design</td>
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<tr>
<td>EDUS 711 Qualitative Methods and Analysis</td>
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</tr>
<tr>
<td>STAT/SOCY 608 Statistics for Social Research</td>
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<tr>
<td>Three credit selective</td>
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</tr>
</tbody>
</table>

### Concentration component

**Adult education and human resource development track**

(select five of the following courses)

- ADLT 700 Technologically Mediated Adult Learning Systems
- ADLT 701 Advanced Program Planning in Adult Education and Human Resource Development
- ADLT 702 Seminar in Adult Learning Theories
- ADLT 703 The Adult Education and Human Resource Development Training Consultant
- ADLT 704 Groups, Teams and Organizational Learning
- ADLT 705 Global Human Resource Development
Educational leadership track
(recommended sequence)
ADMS 701 Development and Implementation of Administrative Policies in Education
ADMS 704 School Business Administration
ADMS 705 Planning Educational Facilities
ADMS 707 Advanced Educational Law
TEDU 617 Instructional Models

Instructional leadership track
(required sequence)
ADMS 701 Development and Implementation of Administrative Policies in Education
TEDU 617 Instructional Models
TEDU 730 Educational Staff Development
TEDU 731 Instructional Theories and Strategies
Elective

Research and evaluation track
(select five courses from the appropriate concentration)

Research concentration
EDUS 651 Topics in Education: Educational Research and Evaluation
MGMT 643 Applied Multivariate Methods
NURS 772 Advanced Qualitative Research Methods
PPAD 721 Survey of Applied Research Methods in Public Policy and Administration
PPAD 711 Seminar in Public Policy and Administration I
SOCY 605/PADM 605 Survey Research Methods
SOCY 623 Causal Analysis

Evaluation concentration
EDUS 651 Topics in Education
EDUS 661 Educational Evaluation: Models and Designs
EDUS 662 Educational Measurement and Evaluation
PPAD 627 Workshop in Policy Analysis and Evaluation
SOCY 605/PADM 605 Survey Research Methods

Special education and disability policy track
(required sequence)
TEDU 705 Seminar on Disability Policy
TEDU 706 Personnel Development in Special Education
TEDU 707 Critical Issues in Special Education
TEDU 708 Designing, Funding and Conducting Research in Special Education
TEDU 709 Directed Readings in Special Education

Urban services leadership track
Courses in career-relevant skills within an urban context with approval of adviser.

Cognate component

Adult education and human resource development track
The cognate component must be developed outside of the School of Education.

Educational leadership track
The concentration and cognate components combined must include at least nine credit hours outside of the School of Education.

Instructional leadership track
The cognate component must be developed outside of the School of Education.

Research and evaluation track
Students who choose the research concentration are required to complete an evaluation cognate. Students who choose the evaluation concentration must complete a research cognate. The concentration and cognate components combined must include at least nine credit hours outside of the School of Education.

Special education and disability policy track
The cognate component must be developed outside of the school of education.

Urban services leadership track
Either the concentration component or the cognate component, but not both, must be developed in the School of Education.

Externship component

Dissertation component
EDUS 890 Dissertation Seminar
EDUS 899 Dissertation Research

Restricted elective

Other Ph.D. in Education program requirements

Residency requirement
Ph.D. in Education students are required to complete a minimum of 12 credit hours each calendar year, commencing with the first semester in which the student enrolls for course work.
Continuing doctoral status

At the completion of 15 credit hours (excluding prerequisite courses), Ph.D. in Education students are evaluated for continuing doctoral status by the director of graduate studies in education. To attain continuing doctoral status, the student must have attained a minimum cumulative GPA of 3.3.

Program planning

Ph.D. in Education students are required to submit a final plan of program study before the completion of the 27th credit hour of study.

Comprehensive examination

Ph.D. in Education students are required to pass a comprehensive examination at the completion of all course work (excluding the dissertation component). The examination is scheduled once each semester over a two-day period.
The School of Engineering began operation on July 1, 1995 with its first class graduating in May 2000. Computer Science joined the School of Engineering in the fall semester 2001. Undergraduate degrees are offered in computer science, biomedical engineering, chemical engineering, electrical and computer engineering and mechanical engineering. The School of Engineering offers a Master of Science degree in engineering, biomedical engineering and computer science. The Doctor of Philosophy degree is offered in engineering and in biomedical engineering. The biomedical engineering program also participates in an M.D./Ph.D. program with the School of Medicine. Students in the School of Engineering’s advanced degree programs may access courses via the Commonwealth Graduate Engineering Program (CGEP), which coordinates course offerings through the University of Virginia, Virginia Polytechnic Institute and State University, George Mason University and Old Dominion University (see the Interdisciplinary and Cooperative Graduate Studies section of this bulletin for details). The School of Engineering’s main offices are located on the Monroe Park Campus of VCU. Biomedical engineering, established in 1984, is located on the MCV Campus of VCU and has well-established ties to the schools on that campus. Graduate degree programs in the School of Engineering are coordinated through the assistant dean for graduate affairs. For further information on these programs, contact the assistant dean for graduate affairs in the School of Engineering at (804) 828-0266.

Programs

The School of Engineering offers the following graduate degree programs:

- M.S. in Computer Science
- M.S. and Ph.D. in Biomedical Engineering
- M.S. and Ph.D. in Engineering

**Joint degree**

M.D./Ph.D. in Biomedical Engineering in participation with
the School of Medicine

**Interdisciplinary and cooperative studies degree**
M.S. Commonwealth Graduate Engineering Program

**Post-baccalaureate certificate**
Computer Science

**Admission requirements**

Application forms and instructions for applying to all graduate programs are available on the Graduate School Web site at [http://www.vcu.edu/graduate](http://www.vcu.edu/graduate).

The following credentials constitute an application and should be sent to the Graduate School, Virginia Commonwealth University, P.O. Box 843051, Richmond, VA 23284-3051.

- Application for admission on a form furnished to the applicant on request. A fee paid in the form of a check or money order (payable to VCU) must accompany the application. The fee cannot be returned nor credited toward tuition payment.

- Official transcripts of all undergraduate and graduate work sent directly from college or university registrars to the Graduate School.

- Letters of recommendation from three present or former teachers or others believed by the applicant to be qualified to evaluate fitness to engage in graduate study for the degree in the field of choice.

- A personal letter from the applicant summarizing motivation, education and aims in pursuing graduate study.

- Verbal, quantitative and analytical portions of the Graduate Record Examination are required for all applicants and are recommended for M.D./Ph.D. applicants. Advanced or subject tests are not required.

- International applicants for whom English is not their native language must meet university admission requirements for performance on the Test of English as a Foreign Language (TOEFL). The current minimum TOEFL score is 550 paper/213 computer-based. Acceptance of an applicant is based upon the recommendation of the Admissions Committee with approval of the program chair and the assistant dean for graduate affairs.

**Registration**

In the biomedical engineering program, all new students begin their course of study in the fall semester (August). Spring semester admissions require the recommendation of the graduate program director, approval of the chair and the assistant dean for graduate affairs. Students may begin a course of study in either the fall or spring semesters for the engineering and computer science graduate programs, although a start in the fall semester is preferred. For the CGEP, students may begin a course of study in either the fall or spring semester.

**Assistantships**

A number of full or partial teaching and research assistantships are available in the engineering, biomedical engineering and computer science programs. Assistantships are awarded based on
academic performance. Full support assistantships are for a 12-month period and cover tuition, fees and a stipend. A brief description of financial aid based on demonstrated need is detailed in the chapter of this bulletin regarding financial aid. Need-based aid programs include National Direct Student Loan, college work-study and institutional loans.

Honors

The Alexander Mallory Clarke Award for academic excellence is given each spring to the biomedical engineering student who is recognized by the faculty for outstanding achievement in the first year of study.

The student adviser and the advisory committee

The successful completion of the requirements for both the M.S. and Ph.D. degrees in engineering and biomedical engineering includes an original research project, the progress of which is guided by a faculty adviser and monitored by an advisory committee. Students receive guidance and counsel from the graduate program director prior to the appointment of the permanent adviser. The permanent adviser holds the primary responsibility for directing the development of the student in the program and providing the appropriate guidance and counsel essential to the scholarly development of the student. An advisory committee, appointed shortly after the permanent adviser is appointed, serves as both an examining and consultative body. Its function is to assist the development of the student. Committee members hold a special responsibility as a source of counsel for the student. For details, students should contact either the respective graduate program director or the program chair.

Graduate degree requirements

- All full-time graduate students are expected to register for a minimum of 12 hours of graduate credits per semester and at least one semester hour during the summer, exclusive of audited courses. This requirement includes research.
- At least half of the credits required in the student’s program must be those designated as exclusively for graduate students; that is, those at the 600 level or above.
- Graduate students are required to remain in good academic standing through the course of their degree program. Unsatisfactory student performance includes:
  - the assignment of a grade of "U," "D" or "F" in any course.
  - failure to maintain a cumulative GPA of 3.0 or greater.
  - failure to pass the written or oral comprehensive examination.
  - failure to pass the final examination.

A student whose performance is unsatisfactory must successfully petition the dean of the Graduate School to continue in the graduate program. Unsatisfactory performance also constitutes grounds for the termination of financial assistance to the student.

- Graduate students may not take the comprehensive examination for the Ph.D. degree if their overall GPA is less than 3.0 or if the GPA for courses within the program is below 3.0. Students may not take the final oral examination for the M.S. or Ph.D. degree if their overall GPA is below 3.0. The student’s advisory committee is the examining body for the
Comprehensive examinations

In order to advance to doctoral candidacy, the student must pass both written and oral comprehensive examinations. The written examination(s) focuses on the subject matter deemed critical as a foundation in the program. The examination(s) is largely based on material covered in required course work and its application to theoretical and practical problems. The oral examination, which follows successful completion of the written examination(s), is administered to assess the ability of the student to integrate information and display an appropriate mastery of problem-solving capabilities. Graduate students may not take the comprehensive exam if their overall GPA is less than 3.0. Biomedical engineering students must also have a GPA of at least 3.0 for biomedical engineering courses in order to take the comprehensive exam. For further details, see the graduate program director or the program chair.

Admission to candidacy

Before admission to candidacy for the doctorate, students must have: (1) completed required course work, (2) successfully completed the comprehensive examinations and (3) fulfilled all additional departmental requirements. In the Biomedical Engineering Department, students must complete all the requirements for the master’s degree, including successfully defending a master’s thesis, before being admitted into candidacy for the doctoral degree. This last requirement will be waived for those students who: (1) already have a master of science in biomedical engineering or related discipline or (2) have successfully completed two years of medical school in the M.D./Ph.D. program as described in the School of Medicine chapter of this bulletin. In the engineering program, a student may seek admission to candidacy for the Doctor of Philosophy degree without first completing the research and thesis portion of the Master of Science degree.

Dissertation research

The student must conduct a substantial original investigation under the supervision of the permanent adviser and prepare a dissertation reporting the results of this research and analyzing its significance in relation to existing scientific knowledge.

When the dissertation has been completed, copies in accepted form and style are submitted to the members of the advisory committee. The committee members decide upon the acceptability of the candidate’s dissertation. A favorable unanimous vote is required to approve the dissertation and all examiners are required to vote.

If the advisory committee accepts the dissertation for defense, the candidate appears before them for a final oral examination. This examination is open to all members of the faculty. The final oral examination will be limited to the subject of the candidate’s dissertation and related matters. A favorable vote of the candidate’s advisory committee and no more than one negative
vote shall be required for passing the final oral examination. All committee members must vote. There shall be an announcement of the candidate’s name, department and title of dissertation, together with the day, place and hour of the final oral examination at least 10 working days in advance.

Nondegree-seeking students

Students not admitted to a degree program must obtain permission from the program director and chair before being allowed to register for courses.

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 the student was matriculated.

Commonwealth Graduate Engineering Program

The degree requirements for the Commonwealth Graduate Engineering Program are described in the Interdisciplinary and Cooperative Graduate Study section of this bulletin.
Biomedical Engineering Department

The biomedical engineering program offers both the Master of Science and the Doctor of Philosophy degrees. Biomedical engineering provides in-depth study in a variety of specialization areas including biomedical imaging systems, orthopedic biomechanics, tissue and cellular engineering, biomaterials, artificial organs, human-computer interfaces, cardiovascular devices and rehabilitation engineering. The program allows students to participate in cutting-edge research in one of the nation’s most advanced engineering programs. Biomedical engineering 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 Health System’s MCV Hospitals.

Admission requirements

In addition to the university admission requirements, biomedical engineering has the following admission criteria for all entering graduate students (for both M.S. and Ph.D. applicants):

- Minimum GPA of at least 3.0 during the previous 60 credit hours (for applicants with a B.S.) or for all graduate credit hours (for applicants with an M.S.)
- Minimum GRE score of 1100 (combined verbal and quantitative sections) including a minimum 600 on the quantitative section
- Minimum TOEFL score of 600 paper/250 computer-based for students whose first or native language is not English.

Biomedical engineering will accept a maximum of six credit hours for transfer into either the M.S. or Ph.D. program if the original grades for such courses are "B" or higher (or equivalent).
School of Engineering

Master of Science of Biomedical Engineering

M.S. requirements in Biomedical Engineering

Students pursuing an M.S. in Biomedical Engineering must successfully complete a minimum of 28 credit hours exclusive of research credits.

Required biomedical engineering courses (minimum three of the following)

- EGRB 507 Biomedical Electronics and Instrumentation
- EGRB 603 Biomedical Signal Processing
- EGRB 511 Fundamentals of Biomechanics
- EGRB 613 Biomaterials

Required courses in other departments

- Physiology and Statistics

Elective courses (biomedical engineering or other area)

- Research Seminar (biomedical engineering)

(credit hours)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required biomedical engineering courses</td>
<td>9</td>
</tr>
<tr>
<td>Required courses in other departments</td>
<td>8</td>
</tr>
<tr>
<td>Elective courses</td>
<td>9</td>
</tr>
<tr>
<td>Research Seminar</td>
<td>2</td>
</tr>
<tr>
<td>(minimum)*</td>
<td>28</td>
</tr>
</tbody>
</table>

* EGRB 697 Directed Research is required at a level to be determined by each student’s advisory committee.

This program is nominally a two-year program leading to the M.S. in Biomedical Engineering. Prior evidence of completion of physiology and/or statistics may result in a waiver of the requirements for these courses as determined by the graduate program coordinator and/or the department chair. Each Master of Science student must successfully complete a thesis describing his or her individualized research project. At the completion of the research, the student must present the research to the advisory committee and undergo an examination of the research results, thesis documentation and underlying educational foundation necessary to have successfully completed the research. Upon successful completion of the examination and thesis, the student may apply for graduation from Virginia Commonwealth University with the Master of Science in Biomedical Engineering.
School of Engineering

Ph.D. in Biomedical Engineering

Ph.D. requirements in Biomedical Engineering

A minimum of 39 credit hours, exclusive of research credits, is generally required.

<table>
<thead>
<tr>
<th>Required biomedical engineering courses</th>
<th>12 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGRB 507 Biomedical Electronics and Instrumentation</td>
<td></td>
</tr>
<tr>
<td>EGRB 603 Biomedical Signal Processing</td>
<td></td>
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<tr>
<td>EGRB 511 Fundamentals of Biomechanics</td>
<td></td>
</tr>
<tr>
<td>EGRB 613 Biomaterials</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required courses in other departments</th>
<th>8 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiology and statistics</td>
<td></td>
</tr>
</tbody>
</table>

| Elective courses (biomedical engineering or other area)                     | 15 credits |
| Research Seminar (Biomedical Engineering)                                  | 4 credits  |
| Directed Research (Biomedical Engineering)                                 | 52 credits |

| minimum                                                                    | 91 credits |

This program is nominally a three-year program leading to the Ph.D. in Biomedical Engineering. Prior evidence of completion of physiology and/or statistics may result in a waiver of the requirements for these courses as determined by the graduate program coordinator and/or the department chair. A period of residence of at least three consecutive terms is required. Residency is defined as registration for at least nine credits per term. A time limit of seven calendar years, beginning at the time of first registration, is placed on work to be credited toward the Doctor of Philosophy degree.

At the conclusion of the first year of doctoral study (or when the core course requirements have been satisfied), each doctoral student must successfully complete written and oral portions of a comprehensive examination. This examination is designed to test the student on fundamental knowledge in engineering as evidenced by the core (and related elective) courses within the curriculum. Upon completion of this examination, a doctoral student is permitted to initiate a doctoral research project and to complete additional course work consisting of biomedical engineering, clinical and science electives.

Upon completion of all course work and the intended research, a doctoral student must prepare a dissertation describing the completed research. A dissertation defense, under the direction of the advisory committee, will be scheduled to examine the student’s research, dissertation documentation, and underlying fundamental knowledge needed to complete the research. Upon successful completion of the defense and dissertation, the doctoral student may apply for
graduation from Virginia Commonwealth University with the Doctor of Philosophy in Biomedical Engineering.
M.D./Ph.D. in Biomedical Engineering

The Biomedical Engineering Department also participates in an M.D./Ph.D. Program with the School of Medicine. Interested students should consult the Biomedical Engineering graduate program coordinator or the department chair.
School of Engineering

Master of Science in Engineering and Doctor of Philosophy in Engineering

The Engineering program offers both the Master of Science and the Doctor of Philosophy degrees. The engineering program utilizes the faculty and research facilities of the Computer Science Department as well as those of Chemical, Electrical and Mechanical Engineering to expose students to advanced and emerging technologies. Research thrusts in the School of Engineering include computer science, life sciences, micro-nano technology, and manufacturing and design. Engineering M.S. and Ph.D. degrees are interdisciplinary and provide a wide array of specialization areas including microelectronics, silicon fabrication, VLSI design, networks, embedded systems, image/signal processing, photonics/optical electronics, neural networks, MEMS, digital communications, micro-nanotechnology, smart materials and devices, robotics, manufacturing and design, polymers, biochips, biochemical and biological engineering, fuel cells, software engineering, parallel processing, databases, compiler theory, machine learning, and artificial intelligence. These areas cross the discipline lines of computer science, chemical, electrical, and mechanical Engineering.

For students who want to study and conduct research in these areas or related areas, the following tracks are available:

- Chemical engineering track (EGRC)
- Electrical engineering track (EGRE)
- Mechanical engineering track (EGRM)
- Computer science track (CMSC - Ph.D. only)
- Engineering track (ENGR)

Each track can be tailored to meet the individual student’s academic goals and research interests. Students seeking to take course work and conduct their research in one of these tracks should contact the graduate program coordinator or program chair of the desired track for detailed information about that track.

Admission requirements

In addition to the general requirements for admission to graduate programs in the Graduate School and the School of Engineering, applicants to the engineering program must have a B.S. degree in engineering, computer science or a closely related discipline.

Chemical Engineering Track (EGRC)
The Chemical Engineering track is designed primarily for students who are interested in applying chemical and engineering principles toward important contemporary topics including process design, metabolic engineering, biosensor and biochip development, high-performance polymers in medicine and energy conversion, polymer surface science, and environmentally benign polymer processing technologies. Major emphasis is placed on chemical engineering fundamentals with additional emphasis on applied chemistry and life sciences.

**Electrical Engineering Track (EGRE)**

The Electrical Engineering track is designed to prepare students for practice, research and/or teaching of electrical engineering at the advanced level. The track provides intensive preparation for professional practice in the microelectronics, nanoelectronics, computer engineering and controls and communications aspects of electrical 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.

**Mechanical Engineering Track (EGRM)**

The Mechanical Engineering track is designed primarily for students who have an interest in pursuing research in the variety of areas of mechanical engineering. Those include but are not limited to thermal sciences, materials, design and manufacturing, and computational mechanics. Emphasis is placed on modern research areas such as smart materials, flow controls, microelectro mechanical systems (MEMS), nanotechnology and biomechanics.

**Computer Science Track (CMSC)**

The Computer Science 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.

**Engineering Track (ENGR)**

The Engineering track is designed primarily for students whose interests span a number of academic and research areas. The student and his/her adviser develop a program of study that combines elements of two or more of the individual tracks.

**Degree requirements**

Each student seeking the M.S. degree is required to take a minimum of 33 semester credits of approved graduate courses (including research). Ph.D. students must take a minimum of 27 semester credits (including research) beyond the master’s degree. In addition to conducting significant research, all engineering graduate students must complete course work in the two core areas of manufacturing and design (ENGR 501 or ENGR 502 or ENGR 565) and business and
management (MGMT 641 or MGMT 655 or STAT 541). No individual core or elective courses may be used for both M.S. and Ph.D. degrees. At least half of the credits required in the student’s program must be those designated as exclusively for graduate students, that is those at the 600 level or above.

Curriculum

There are four components of each M.S. and Ph.D. track in the engineering curriculum:

Core component. This component emphasizes the study of manufacturing systems and business/management principles.

Concentration (track-specific) component. This component allows the student to pursue a series of courses that focus on a specific field of engineering and serve as the student’s primary engineering discipline.

Track electives component. This component allows the student to take courses in either engineering or science with approval of the student’s adviser.

Directed research component. This component emphasizes research directed toward completion of degree requirements under the direction of an adviser and advisory committee.

M.S. degree requirements

The Master of Science student is expected to earn a minimum of six core course semester credits, three in manufacturing systems and three in business and management. Each student must complete nine semester credits in concentration course work, six semester credits in track electives course work, and 12 semester credits in thesis research. The student’s adviser must review and approve all course work and thesis research credits. The total of all credits must be at least 33.

Typical program of study – B.S. to M.S. in Engineering with chemical engineering, electrical engineering, mechanical engineering and engineering tracks

<table>
<thead>
<tr>
<th>Component</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core component</td>
<td>6</td>
</tr>
<tr>
<td>Manufacturing systems and business and management</td>
<td></td>
</tr>
<tr>
<td>Concentration component</td>
<td>9</td>
</tr>
<tr>
<td>Track-specific course work</td>
<td></td>
</tr>
<tr>
<td>Track electives</td>
<td>6</td>
</tr>
<tr>
<td>Engineering or science course work</td>
<td></td>
</tr>
<tr>
<td>Directed research</td>
<td>12</td>
</tr>
<tr>
<td>ENGR 697</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>33</td>
</tr>
</tbody>
</table>

Students seeking to take course work and conduct their thesis research in one of these tracks should contact the graduate program coordinator or program chair of the desired track for more information about that track. Eighteen to 20 months of study usually are necessary to complete.
the requirements for the Master of Science in Engineering degree. A time limit of five calendar years, beginning at the time of first registration, is placed on work to be credited toward the Master of Science degree. Generally, a maximum of six credits of approved graduate course work required for a master's degree may be transferred from another program at VCU or outside institution and applied toward the degree.

Each student must conduct an original investigation under the supervision of the permanent adviser and prepare a thesis reporting the results of this research and analyzing its significance in relation to existing scientific knowledge. This study is reported in a thesis prepared in acceptable form and style. Upon approval of the thesis by the adviser, the student submits a copy to each member of the advisory committee. The student’s advisory committee members examine the thesis and decide upon its acceptability. Each committee member reports to the student’s adviser when the thesis is acceptable for defense. The thesis is approved for defense only if accepted unanimously. Upon approval of the thesis, the student appears for a final oral examination administered by the student’s advisory committee. This examination of an M.S. candidate includes the subject matter of course work as well as the thesis.

**Ph.D. degree requirements**

A minimum of 60 credit hours beyond the bachelor’s degree, including research credits, is generally required for the Ph.D. in Engineering. The Ph.D. student is expected to earn a minimum of six core course semester credits, three in manufacturing systems and three in business and management unless credits were received for these courses (or equivalent courses) as part of the master’s degree. Students holding the master’s degree (and six credits of core course work) must complete a minimum of six semester credits in concentration course work and 21 semester credits in dissertation research. The student’s adviser must approve all course work. The total of all credits must be at least 27 excluding credits for core courses.

**Typical program of study - M.S. to Ph.D. in Engineering with chemical engineering, electrical engineering, mechanical engineering, computer science and engineering tracks**

<table>
<thead>
<tr>
<th>Component</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core component</td>
<td>6</td>
</tr>
<tr>
<td>Manufacturing systems and business and management, unless requirement met at master’s level</td>
<td></td>
</tr>
<tr>
<td>Concentration component</td>
<td>6</td>
</tr>
<tr>
<td>Track-specific course work</td>
<td></td>
</tr>
<tr>
<td>Directed research</td>
<td>21</td>
</tr>
<tr>
<td>ENGR 697</td>
<td></td>
</tr>
</tbody>
</table>

**Typical program of study - B.S. to Ph.D. in Engineering with chemical engineering, electrical engineering, mechanical engineering, computer science and engineering tracks**

Students entering the doctoral program with a B.S. degree, but not the M.S., will require a minimum of 60 postbaccalaureate credits (33 for M.S. level, including core courses, and an additional 27 for Ph.D. level).
<table>
<thead>
<tr>
<th>Component</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core component</td>
<td></td>
</tr>
<tr>
<td>Manufacturing systems and business and management</td>
<td>6</td>
</tr>
<tr>
<td>Concentration component</td>
<td></td>
</tr>
<tr>
<td>Track-specific course work</td>
<td>15</td>
</tr>
<tr>
<td>Track electives</td>
<td></td>
</tr>
<tr>
<td>Engineering or science course work</td>
<td>6</td>
</tr>
<tr>
<td>Directed research</td>
<td></td>
</tr>
<tr>
<td>ENGR 697</td>
<td>33</td>
</tr>
</tbody>
</table>

**Minimum: 60 credits**

A minimum of three years of study, including research, is necessary to complete all requirements for the Ph.D. A period of residence of at least three consecutive semesters is required. Residency is defined as registration for at least nine credits per semester. A time limit of seven calendar years, beginning at the time of first registration, is placed on work to be credited toward the Ph.D.
School of Engineering

Chemical Engineering Department

The Chemical Engineering Department prepares students for highly competitive, national placement in chemical engineering employment or graduate study by anticipating and preparing for ever-broadening expectations and skills.

The department offers a Bachelor of Science degree with a concentration in chemical engineering. A chemical engineering track is available in the Master of Science in Engineering as well as the Ph.D. in Engineering.

L. Thomas Overby
Professor and Interim Department Chair

M.S. and Ph.D. in Engineering – chemical engineering track
School of Engineering

Computer Science Department

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.

Admission requirements

In addition to the general requirements for admission to graduate programs in the Graduate School and the School of Engineering, computer science applicants must have a bachelor’s degree in computer science or a closely related discipline.
School of Engineering

Master of Science in Computer Science

Degree requirements

A student may choose either a thesis or non-thesis degree program. The thesis option is suggested for students who have a strong research interest or those who wish to pursue a Ph.D. degree. Interdisciplinary programs of study that involve computer science and another discipline are encouraged; however, a core of computer science courses is required. Courses not labeled CMSC must show relevance to the student’s program of study and must be submitted for approval by the Computer Science Graduate Program Committee through the student’s adviser. At most, six non-CMSC credits may be applied toward the degree.

M.S. requirements in computer science

Thesis option (30 credits):

- A minimum of 27 non-thesis credits, including at least 12 credits at the 600 level.
- Three credits in CMSC 698 Thesis.

Non-thesis option (33 credits):

- A minimum of 33 credits, including at least 18 credits at the 600 level.

Courses that are transferred are subject to the following rules. These credits must not have been applied to any other degree; however, they may have been taken as part of a post-baccalaureate certificate program.

- No more than six credits in graduate-level courses taken at VCU before admission to the M.S. program may be counted toward the M.S. degree.
- Up to one-third of a student’s non-research graduate-level credits can be transferred into the M.S. program from another college or university.
- The number of credits that may be transferred by students pursuing an M.S. in Computer Science through the Commonwealth Graduate Engineering Program (CGEP) is limited by CGEP policy to 50 percent of the required credits.
- All transfer credits must be approved by the Computer Science Graduate Program Committee using the graduate course transfer form.

Students seeking to take a research credit course (CMSC 697 Directed Research; or CMSC 698 Thesis) in a given semester must find a faculty member willing to supervise the research. Before enrolling in the course, the student must submit a research proposal form to the Computer Science Department.
Science Graduate Program Committee no later than the end of the 10th week of the prior semester. At most three credits of CMSC 697 can be applied toward the degree.

The thesis can be in any area of computer science or an interdisciplinary area with a strong computer science component. The proposed content will be developed in conjunction with the student’s thesis adviser. The thesis may take the form of an in-depth literature search and exposition on some area of computer science, a substantial project or other application that involves a depth of computer science knowledge, original research, or some combination of these forms. The student will produce a written thesis in the format specified by the VCU Graduate School, and will publicly defend the thesis before a committee consisting of the thesis adviser, at least one other faculty member from the computer science program, and a faculty member from outside of the computer science program.
School of Engineering

Electrical and Computer Engineering Department

The Electrical and Computer Engineering Department prepares students for highly competitive, national placement in electrical 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 a Bachelor of Science degree with concentrations in electrical engineering and computer engineering. An electrical engineering track is available in the Master of Science in Engineering as well as the Ph.D. in Engineering.
Mechanical Engineering Department

The Mechanical Engineering Department provides quality graduate and undergraduate education in the diverse area of mechanical engineering, emphasizing:

- sound technical foundation.
- creative approach to design and problem solving.
- ability to communicate effectively.
- the understanding of sound business practice.

The department offers a Bachelor of Science degree with a concentration in mechanical engineering. A mechanical engineering track is available in the Master of Science in Engineering as well as the Ph.D. in Engineering.
School of Medicine

Mission

The mission of the School of Medicine encompasses education and research in biomedicine including applications providing a constant improvement of the quality of health care for all citizens of Virginia. By using innovative, scholarly activity to create new knowledge, providing better systems of medical and science education and developing more effective health care methods for diverse populations, the School of Medicine seeks to enhance the training of physicians and biomedical scientists. The School of Medicine shares the general objectives of VCU.

1. To maintain an environment of educational excellence that will attract students and faculty interested in an institution maintaining the highest academic standards.

2. To promote an educational atmosphere that will develop in students: (a) desire and interest in lifelong learning, (b) intellectual curiosity, and (c) excellence in skills and knowledge required for the solution of problems of health and disease for diverse populations.

3. To provide standards of clinical practice and scientific investigation that will serve students as examples throughout their professional careers.

The primary aim of the School of Medicine is to provide an academic environment appropriate for the education of its students, including undergraduate medical students, advanced-degree (graduate) students and graduate physician house officers, as well as continuing education directed toward the needs of practicing physicians. In the classroom, laboratory, clinic and hospital, the faculty and students are brought together in teaching-learning experiences that promote scientific scholarship and personal growth in knowledge and professional skills applicable to careers in a diverse workplace environment.

The School of Medicine and its faculty have vested responsibilities for the advancement of knowledge through research and for service to the community through...
application of skills in biomedical knowledge, health care leadership and patient care. Therefore, the school shares with teaching the interdependent and almost inseparable objectives of research and service.

The School of Medicine is located on the MCV Campus of Virginia Commonwealth University.

Faculty and facilities

The School of Medicine consists of 700 full-time faculty, including affiliates, assisted by 630 residents and fellows and over 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 United States. The School of Medicine has established a geographically separate campus at the Inova Fairfax Hospital. Beginning in 2005, 24 third-year students will take all their clinical clerkships at Inova Fairfax Hospital. Their fourth year elective program also will be based at the Inova Fairfax Hospital.

Departments/divisions

The departments and divisions of the School of Medicine and the unit chair or head are listed below. For comprehensive information on the School of Medicine departments and faculty, including the Faculty Expertise Directory and departments listings, please go to the school Web site at http://www.medschool.vcu.edu.

Department of Anatomy and Neurobiology

John T. Povlishock
Professor and Department Chair

Department of Anesthesiology

Carlos U. Arancibia
Professor and Department Chair

Department of Biochemistry

Sarah Spiegel
Professor and Department Chair

Department of Biostatistics
Walter H. Carter Jr.
Professor and Department Chair

Department of Dermatology

Algin B. Garrett
Professor and Department Chair

Department of Emergency Medicine

Joseph P. Ornato
Professor and Department Chair

Department of Family Medicine

Anton John Kuzel
Professor and Department Chair

Department of Human Genetics

Peter O’Connell
Professor and Department Chair

Department of Internal Medicine

Richard P. Wenzel
Professor and Department Chair

Division of Cardiology
George W. Vetrovec
Professor and Division Head

Division of Endocrinology and Metabolism
John E. Nestler
Professor and Division Head

Division of Gastroenterology
Arun J. Sanyal
Professor and Division Head (1989)

Division of General Medicine and Primary Care
Betty Anne Johnson
Professor and Interim Division Head

Division of Hematology/Oncology
Thomas J. Smith
Professor and Division Head
Division of Infectious Diseases
Gordon L. Archer
Professor of Internal Medicine and Division Head

Division of Nephrology
Todd W.B. Gehr
Professor and Division Head

Division of Pulmonary Disease
Alpha A. Fowler III
Professor and Eminent Scholar and Division Head

Division of Quality Health Care
Wally R. Smith
Associate Professor and Division Head

Division of Rheumatology, Allergy and Immunology
Lawrence B. Schwartz
Professor, Eminent Scholar and Division Head

Department of Legal Medicine

Marcella F. Fierro
Professor and Department Chair

Massey Cancer Center

Gordon D. Ginder
Professor and Director

Department of Microbiology and Immunology

Dennis E. Ohman
Professor and Department Chair

Department of Neurology

Alan R. Towne
Professor and Department Chair

Division of Child Neurology
John M. Pellock
Professor and Division Head

Division of Neuro-ophthalmology
Warren L. Felton III
Associate Professor and Division Head
Division of Neuro-physiology
Lawrence Morton
Associate Professor and Division Head

Department of Neurosurgery

Harold F. Young
Professor and Department Chair

Department of Obstetrics and Gynecology

John W. Seeds
Professor and Department Chair

Department of Ophthalmology

William H. Benson
Associate Professor and Interim Department Chair

Department of Orthopedic Surgery

Robert S. Adelaar
Professor and Department Chair

Department of Otolaryngology

Aristides Sismanis
Professor and Department Chair

Department of Pathology

David S. Wilkinson
Professor and Department Chair

Division of Autopsy Pathology and Neuropathology
Nitya R. Ghatak
Professor and Division Head

Division of Cellular and Molecular Pathogenesis
Alphonse E. Sirica
Professor and Division Head

Division of Clinical Pathology
Richard A. McPherson
Professor and Division Head

Division of Molecular Diagnostics
Carleton T. Garrett
Professor and Division Head
Division of Surgical Pathology and Cytopathology
Celeste N. Powers
Professor and Division Head

Department of Pediatrics

Joseph Laver
Professor and Department Chair
Division of Adolescent Medicine
Richard R. Brookman
Professor and Division Head
Division of Allergy/Immunology
Anne-Marie Irani
Professor and Division Head
Division of Community Pediatrics
Bob Archuleta
Bundy Professor and Division Head
Division of Critical Care Medicine
John J. Mickell
Professor and Division Head
Division of Gastroenterology
Martin F. Graham
Professor and Division Head
Division of General Pediatrics and Emergency Care
Linda D. Meloy
Associate Professor and Division Head
Division of Pediatric Endocrinology
Anil Kumar
Assistant Professor and Division Head
Division of Hematology/Oncology
Edward C. Russell
Professor and Division Head
Division of Infectious Diseases
Stuart P. Adler
Professor and Division Head
Division of Neonatal/Perinatal Medicine
Gary R. Gutcher
Professor and Division Head
Division of Nephrology
Vimal Chadha
Assistant Professor and Division Head
Division of Pediatric Cardiology
William B. Moskowitz
Professor and Division Head
Division of Pediatric Pulmonology
Greg R. Elliott
Associate Professor and Division Head

**Department of Pharmacology and Toxicology**

Billy R. Martin
Professor and Department Chair

**Department of Physical Medicine and Rehabilitation**

David X. Cifu
Professor and Department Chair
Division of Pediatric Rehabilitation
Jacob A. Neufeld
Associate Professor and Division Head
Division of Rehabilitation Research
Paul H. Wehman
Professor and Division Head

**Department of Physiology**

Margaret C. Biber
Professor and Department Chair

**Department of Preventive Medicine and Community Health**

Tilahun Adera
Professor and Department Chair

**Department of Psychiatry**

Joel J. Silverman
Professor and Department Chair
Division of Addiction Medicine
Elinore F. McCance-Katz
Professor and Division Head

Division of Ambulatory Care
Susan G. Kornstein
Associate Professor and Division Head

Division of Child and Adolescent Psychiatry
Aradhana Sood
Associate Professor and Division Head

Division of Clinical Psychology
Robert P. Hart
Professor and Division Head

Division of Consultation/Liaison Psychiatry
James L. Levenson
Professor and Division Head

Division of Inpatient Psychiatry
Ananda K. Pandurangi
Professor and Division Head

Department of Radiation Oncology

Rupert Schmidt-Ullrich
Professor and Department Chair

Department of Radiology

Ann S. Fulcher
Professor and Department Chair

Division of Nuclear Medicine
Melvin J. Fratkin
Professor and Division Head

Division of Radiation Physics and Biology
Panos P. Fatouros
Professor and Division Head

Department of Surgery

James P. Neifeld
Professor and Department Chair

Division of Cardiothoracic Surgery
Virginia Commonwealth University 2004-05

Vigeshwar Kasirajan
Associate Professor and Division Head

Division of General and Trauma Surgery
Eric J. Demaria
Professor and Division Head

Division of Pediatric Surgery
Charles E. Bagwell
Professor and Division Head

Division of Plastic and Reconstructive Surgery
Austin I. Mehrhof Jr.
Professor and Division Head

Division of Surgical Oncology
Harry D. Bear
Professor and Division Head

Division of Transplant Surgery
Marc P. Posner
Professor and Division Head

Division of Urology
Harry P. Koo
Associate Professor and Division Head

Division of Veterans Administration Medical Center Surgical Services
Thomas A. Miller
Professor and Division Head

Division of Vascular Surgery
Mark M. Levy
Associate Professor and Division Head

Programs

A complete listing of advanced degree programs including links to departments, programs, contact information and application requirements can be found at http://www.medschool.vcu.edu/prospective.

Graduate programs offering master’s and doctoral training in the School of Medicine include:

- anatomy
- biochemistry
- biostatistics
- epidemiology (doctoral training only)
- human genetics
A two-semester post-baccalaureate certificate program offering training for students seeking admission to professional school (i.e., School of Medicine, School of Dentistry) is available as the Pre-medical Basic Health Sciences Certificate. Defined curricula, which also may serve as a foundation in other advanced degree programs, are offered in the following disciplines:

- anatomy
- biochemistry
- human genetics
- microbiology and immunology
- pharmacology and toxicology
- physiology

The school offers a first-professional degree program leading to the Doctor of Medicine. The school also offers combined graduate and professional programs including an M.D. and M.S. or Ph.D. training program, an M.D./M.P.H. program and an M.D./M.H.A. program.

The school also offers combined degree programs at the M.S. and Ph.D. level in cooperation with the School of Dentistry.

The Department of Human Genetics offers a combined degree program that pairs the Master of Genetic Counseling and the Ph.D. in Human Genetics. The school partners with the School of Allied Health Professions to offer combined Anatomy/Physical Therapy and Physiology/Physical Therapy Ph.D. programs.

Recognizing that graduate education should prepare students for a variety of career options, and that developments in the basic sciences have expanded the breadth of scholarship, the school has developed approaches to interdisciplinary education, particularly in the areas of neuroscience, molecular biology and genetics, immunology, and structural biology.
School of Medicine

Graduate studies in medicine

Organization

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.

MCV Campus Graduate Committee

The assembled directors of graduate programs and the associate dean for graduate education form the MCV Campus Graduate Committee, with the associate dean serving as chair of the committee. This committee holds the responsibility for ensuring appropriate administration of graduate programs, reviewing modifications of didactic courses, new course offerings and new programs, reviewing proposed modifications of program curricula to ensure maintenance of standards of quality, avoid duplication and comply with the missions of the school, and for recommending action to the dean. The committee members provide the pool of candidates from which the school representatives to the University Graduate Council are chosen.

The School of Medicine follows the policies of the Graduate School with regard to the modification of existing courses, curricula and programs as well as the introduction of new offerings. Proposals will normally come from the faculty acting through departmental bodies charged with the responsibility of monitoring academic training. In the case of offerings in interdisciplinary areas, these will normally require the input and approval of departments whose faculty and students are participants. The associate dean for graduate education in the School of Medicine may assist in the coordination of the proposal process. Proposed changes and additions are, under University guidelines, subject to review by the Curriculum Committee of the school. The MCV Campus Graduate Committee serves as the Curriculum Committee for the School of

Graduate programs
(804) 828-8336
fax (804) 828-6011

Master's programs

Master of Genetic Counseling/Ph.D. in Human Genetics

Ph.D. programs

Post-baccalaureate Pre-medical Basic Health Sciences Certificate

Combined M.S./Ph.D. and D.D.S. degree programs

Interdisciplinary Ph.D. programs

Combined programs

Combined M.D./Ph.D. program

Combined M.D./M.P.H. and M.D./M.H.A. programs
Medicine. On approval by the MCV Campus Graduate Committee, the approval of the dean of the School of Medicine is required prior to submission to University Graduate Council for review.

Requirements for admission

Application forms and instructions for applying to all graduate programs are available on the Graduate School Web site at http://www.vcu.edu/graduate.

Acceptance of an applicant is based upon the recommendation of the director of graduate programs of the relevant program.

Registration

While most students register for the first semester of a graduate program in the fall term, arrangements may be made to initiate graduate work at other times during the academic year.

Scholarships, assistantships and fellowships

A number of state or federal teaching and research assistantships, scholarships or fellowships are available. A brief description of financial aid based on demonstrated need is contained in the Graduate Studies at VCU chapter of this bulletin. Need-based financial aid programs include National Direct Student Loan, college work-study and institutional loans.

Enrollment

Students are enrolled in a specific program offered by the school. The details of didactic and scholarly requirements are available from the individual programs. Specific curriculum requirements, mechanisms for the appointment of advisers and the format of written and oral comprehensive examinations are established by individual programs.

The student adviser and advisory committee

Students receive guidance and counsel from the director of graduate programs for the appropriate program prior to appointment of the permanent adviser. The permanent adviser holds the primary responsibility for monitoring the development of the student in the program and providing the appropriate guidance and counsel essential to the scholarly development of the student.

An advisory committee, appointed shortly after the permanent adviser is appointed, serves as both an examining and consultative body, functioning to assist the development of the student. Committee members hold a special responsibility as a source of counsel for each student.

1. Each student shall have an adviser and an advisory committee.

2. Appointment of the adviser:
   a. The initial adviser will be the director of the graduate program or his/her designee prior to appointment of the permanent adviser.
   b. A permanent adviser shall be appointed from the graduate faculty by the chair of the MCV Campus Graduate Committee upon recommendation of the chair of the
student’s major department. Appointment should be made no later than the beginning of the fall semester following matriculation. A change in the permanent adviser may be made by the chair of the MCV Campus Graduate Committee upon recommendation of the chair of the major department.

3. Duties of the adviser:

a. The adviser shall, with the student’s advisory committee, have responsibility for guiding the student’s academic program.

b. The adviser shall develop a plan for the student’s didactic program with the student.

c. The adviser shall, on the basis of the proposed didactic and scholarly program for the student, identify members of the faculty to comprise the student’s advisory committee and elicit their agreement to serve, the adviser serving as the chair of the committee.

d. The adviser shall supervise the student’s research work thesis (M.S.)/dissertation (Ph.D.) and preparation and be one of the examiners of the thesis/dissertation.

e. At the close of the spring semester, the adviser shall submit to the program director or the chair of the MCV Campus Graduate Committee a report covering the progress of the student. Copies of the report should be provided to the student and the membership of the student advisory committee by the adviser.

4. The student’s advisory committee:

a. The student’s advisory committee shall be appointed no later than the end of the fall semester of the second year after matriculation by the chair of the MCV Campus Graduate Committee, upon recommendation of the student’s adviser, review by the graduate program director and recommendation of the chair of the department of the permanent adviser. Appointment of the student advisory committee must be completed within three months of the appointment of the permanent adviser and prior to the administration of comprehensive (or final) examinations. The composition of the advisory committee shall be such that significant areas of the student’s scholarly program are represented in the expertise of the faculty members.

   i. The committee for the Ph.D. candidate shall consist of a minimum of five members as follows: the student’s adviser, two other members of the graduate faculty of the department/program in which the student is enrolled and at least two other members of the graduate faculty from departments other than the one in which the student is enrolled (where feasible, from two different departments).

   ii. The committee for the M.S. candidate shall consist of a minimum of three members as follows: the student’s adviser (who serves as chair of the committee), one other member of the graduate faculty of the department/program in which the student is enrolled and one other member of the graduate faculty from a department other than the one in which the student is enrolled.

   iii. A faculty member who is not a member of the graduate faculty may be appointed to a student advisory committee if approved by the MCV Campus Graduate Committee. Appointment is made by the dean of the Graduate School.

b. Duties of the student’s advisory committee:

   i. The advisory committee functions as an advisory body to ensure that timely progress toward degree completion is achieved, as an examining body participating as appropriate for the intended degree in written qualifying examinations and conducting the oral qualifying
examination and final examination, and as a consultative body to provide scholarly counsel.

ii. The student’s advisory committee shall work with the student’s adviser in guiding the student’s graduate program and shall meet at least annually. It is strongly recommended that the advisory committee meet with the student prior to administration of the comprehensive examination(s) by the committee.

iii. The student’s advisory committee shall recommend and approve a degree program (including foreign language if applicable) for the student as soon as it is practical. The proposed program should be filed with the chair of the MCV Campus Graduate Committee no later than the third semester of study.

iv. The student’s advisory committee shall conduct the oral comprehensive and final examination.

**General requirements for graduate degrees**

1. All full-time graduate students are expected to register for a minimum of 12 hours of graduate credit per semester and six semester hours during the summer, exclusive of audited courses. This requirement includes research. As an example, when students are registered for 10 credits in formal courses, they are expected to undertake five credits of research under the direction of their adviser or any approved faculty member. These courses shall be graded as “S” (satisfactory), “U” (unsatisfactory) or “F” (fail). Other grade interpretations are described in the Graduate Studies at VCU chapter of this bulletin. Registration for one credit hour is permitted only with prior permission.

2. Students are required to remain in good academic standing through the course of their degree program. Unsatisfactory student performance includes:

   a. the assignment of a grade of "U," "D" or "F" in any course.

   b. failure to maintain a cumulative GPA of 2.5 or greater.

   c. failure to pass the written or oral comprehensive examination.

   d. failure to pass the final examination. A student whose performance is unsatisfactory must obtain the approval of the MCV Campus Graduate Committee to gain permission for continuing in the graduate program. The committee elicits the recommendation of the department/program (as represented by the director of graduate studies of the appropriate program) and, as appropriate, the student’s adviser in making a determination. Unsatisfactory performance also constitutes grounds for the termination of financial assistance to the student.

3. Students may not take the comprehensive examination for the Ph.D. degree if their overall GPA is less than 2.5 or if the GPA for courses within the major department is below 3.0. Students may not take the final oral examination for the M.S. or Ph.D. degree if their overall GPA is below 3.0. The examining body for the administration of the comprehensive examinations and the final examination is the student advisory committee. For the oral comprehensive examination for Ph.D. students and the final examinations for M.S. students, the body is supplemented by the addition of a representative of the MCV Campus Graduate Committee who chairs the examining body. The representative must be a member of the graduate faculty and is appointed by the chair of the MCV Campus Graduate Committee. The representative holds the responsibility for compliance with protocols appropriate to the examination, including the equitable treatment of the candidate.

4. Copies of the thesis/dissertation consistent with university standards shall be provided to the members of the student’s advisory committee three weeks or more before the date of the defense of the thesis/dissertation. Following acceptance of the thesis/dissertation
defense schedule by the committee, the student must submit a copy of the thesis/dissertation and a request for scheduling of the final examination to the chair of the MCV Campus Graduate Committee a minimum of 10 working days in advance of the examination date. Following completion of the final examination, the candidate is responsible for completing the thesis/dissertation in a format consistent with university guidelines, obtaining the signatures of the Student Committee and department chair on two copies of the thesis/dissertation signature page. The signature pages are brought to the Office of Graduate Education at this stage to obtain the signatures of the dean. On return of the fully executed signature pages, the candidate is responsible for submission of the document to VCU Libraries in accord with institutional policy.

5. A degree is granted only after all requirements have been fulfilled, including payment of all fees to the university, and after submission of the copies of the thesis/dissertation for binding.

6. VCU currently requires registration for a defined credit-hour level during both the didactic and research phases of advanced degree training. For programs requiring the preparation of a thesis or dissertation, there is therefore no obligatory linkage between the accumulation of credit hours and an expectation that a degree be awarded.

As a guide to monitoring the timely completion of the degree within the present enrollment framework, the accumulation of 80 credit hours for a M.S. degree and 180 credit hours for a Ph.D. degree can be taken as a reasonable measure. These credit hour totals refer to degree programs requiring the preparation of a thesis or dissertation. Unless explicitly stated, the figures cited above apply to Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) programs offered by the School of Medicine.

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.

A student enrolled in a graduate program under the supervision of the MCV Campus Graduate Committee may be dismissed from the school in which he is enrolled for failure to meet academic requirements prescribed by his school or failure to exhibit the attitudes and skills deemed necessary to function within his chosen scientific discipline.

Any action by a graduate student in a program under the supervision of the MCV Campus Graduate Committee considered to be unprofessional conduct 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 admission 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, and

4. plagiarism or other scientific misconduct.

Process handbook

An expanded guide to protocols followed in the graduate programs administered by the School of
Medicine is available to students and faculty. This manual of procedures should be consulted following matriculation in a particular program and is available on the Web at http://www.medschool.vcu.edu/gp/documents/studbulletin.pdf.
Advanced graduate study leading to the Master of Science degree is offered in the departments of Anatomy and Neurobiology, Biochemistry, Biostatistics, Human Genetics, Microbiology and Immunology, Pharmacology and Toxicology, and Physiology. The Department of Preventive Medicine and Community Health offers the Master of Public Health degree and the Department of Human Genetics offers the Master of Genetic Counseling degree.

A minimum of 24 semester course hours is required, exclusive of research credits. In practice, it is found that two years of study are usually necessary to complete the requirements. A time limit of five calendar years, beginning at the time of first registration, is placed on work to be credited toward the Master of Science degree. Generally a maximum of one-third of the hours required for a master’s degree may be transferred from another VCU program or outside institution and applied toward the degree upon recommendation of the student's director of graduate programs with concurrence by the chair of the MCV Campus Graduate Committee.

Each student must conduct an original investigation under the supervision of the permanent adviser, prepare a thesis reporting the results of this research and analyze its significance in relation to existing scientific knowledge. This study is reported in a thesis prepared in acceptable form and style.

The body of experimental work to be incorporated into the thesis is subject to the approval of the student advisory committee members. The advisory committee should, therefore, be formally consulted as the research project nears completion to ensure that there is agreement with respect to the material deemed necessary and sufficient for incorporation into the thesis. Such consultation will normally occur in the form of a meeting of the advisory committee with the student. The faculty adviser has a responsibility to advise the student when the meeting of the advisory committee for this purpose should take place.

The thesis is prepared in an acceptable form and style with the counsel of the faculty adviser. The faculty adviser determines when the thesis document can serve as the basis for the final oral examination (or thesis defense). With the approval of the faculty adviser, the final oral examination by the advisory committee is scheduled and the thesis document is distributed to the advisory committee. Distribution of the thesis document to the advisory committee should take place at least 10 working days in advance of the final oral examination. The Office of Graduate Education is to be informed of the scheduling of the final oral examination 10 working days in advance of the scheduled date. The Office of Graduate Education then identifies a representative of the MCV Campus Graduate Committee to chair the examination and provides an announcement of the final oral examination, which includes the name and department of the candidate together with the title of the thesis and the day, place and time of the final oral examination.
The final oral examination is conducted by the student advisory committee at the designated time and place and is open to the faculty. A representative of the MCV Campus Graduate Committee serves as the chair of the examination committee and is a voting member of the examination committee. The subject matter of the examination includes the subject matter of course work as well as the content of the thesis. A favorable vote of the advisory committee with no more than one negative vote is required to indicate that the candidate has passed the final oral examination. All members of the examination committee must vote. The outcome of the final oral examination is reported to the Office of Graduate Education. If the outcome is negative, the final oral examination may be retaken with the approval of the MCV Campus Graduate Committee. Advance approval is requested in writing by the department on behalf of the candidate.

The student advisory committee approves the thesis document as acceptable after the final oral examination has been successfully completed. Approval of the thesis as acceptable is indicated by the signature of all members of the advisory committee on the signature page of the thesis. Approval of the thesis by the advisory committee must be unanimous.

**Master of Genetic Counseling**

A thesis is not required for completion of the Master of Genetic Counseling program. In lieu of the thesis, students in this program are required to successfully pass comprehensive oral and written examinations.

**Master of Public Health**

Advanced graduate study leading to the Master of Public Health degree is offered in the Department of Preventive Medicine and Community Health. A minimum of 36 semester credits is required, including research credits. A minimum of one year of full-time study is usually necessary to complete the requirements. Under the guidance of a faculty adviser, each student must conduct a scientific investigation on a topic relevant to public health, and prepare and report the results of this research.
School of Medicine

Master of Genetic Counseling/Ph.D. in Human Genetics

The Department of Human Genetics offers training that combines preparation for a career as a genetic counselor with research-based doctoral training in a coordinated program that integrates the complementary aspects of these two degree categories.
Doctor of Philosophy programs

Advanced graduate study leading to a Doctor of Philosophy degree is offered in the departments of Anatomy and Neurobiology, Biochemistry, Biostatistics, Human Genetics, Microbiology and Immunology, Pathology, Pharmacology and Toxicology, Physiology, and Preventive Medicine and Community Health.

A minimum of 30 credit hours exclusive of research credits is generally required. In practice, a minimum of four years of study, including research, is necessary to complete all requirements.

For all Ph.D. programs, a period of residence of at least two consecutive semesters is required. In the context of Ph.D. training, "residence" refers to full-time enrollment, equivalent to enrollment of nine or more credit hours in a given academic term. The School of Medicine recommends that doctoral students maintain "residency" status for one academic year (fall and spring terms), usually during the initial year of study. This recommendation is to ensure that the didactic component of training is not prolonged. Students should register in each academic term as a means of ensuring that timely progress toward degree completion is achieved. The specific requirements for residency will be detailed by the individual programs. A time limit of seven calendar years, beginning at the time of first registration, is placed on work to be credited toward the Doctor of Philosophy degree.

Admission to candidacy

The development of the individual as an independent research scientist is a critical component of the Ph.D. degree. The potential for such development is assessed on the basis of both mastery of subject matter and research competency as judged in the context of written and oral examinations administered at the level of the department or program. Students are admitted to candidacy by the dean on the basis of completing examinations as required and the recommendation of the faculty adviser, student advisory committee and graduate program director.

Comprehensive examinations

In order to advance to doctoral candidacy, the student must pass both written and oral comprehensive examinations. The written examination(s) generally focus(es) on the subject matter deemed critical as a foundation in the particular program. Written examinations are largely based on material covered in required course work and its application to theoretical and practical problems. The oral examination, which follows successful completion of written examinations, is administered to assess the ability of the candidate to integrate information and display an appropriate mastery of problem-solving capabilities.
1. To advance to candidacy, the student shall take written and oral examinations designed to determine the potential of the individual for development as an independent research scientist. Advancement to candidacy should preferably take place prior to initiating the third academic year in the program. The written examination is administered by the student’s department/program. In the event of failure, the student, with the approval of the MCV Campus Graduate Committee, may be permitted to repeat the written examination.

2. After passing the written examination(s), the student is eligible for the oral examination. The oral examination is conducted by the student’s advisory committee and is chaired by a graduate faculty member representing the MCV Campus Graduate Committee who serves as a voting member of the examining committee. The oral examination is to be administered no later than six months after passing the written examination. (Departments/programs may require a shorter interval.)

3. The oral examination is scheduled through the Office of Graduate Education. An announcement of the candidate’s name, department/program, and the time and place of the examination shall be posted at least 10 working days in advance of the examination. If a written document prepared by the candidate is a component of the examination, the document shall be provided to the members of the examining committee at least 10 working days in advance of the examination. The oral comprehensive examination is open to all members of the faculty. Faculty members in attendance may ask questions of the candidate, but their questions shall not be presented until after the advisory committee has completed its questions. Faculty members other than those on the advisory committee shall not vote on the success or failure of the candidate. If a student fails the oral examination, the student may be reexamined with the approval of the MCV Campus Graduate Committee.

4. A favorable vote of the examining committee (all members of the body being required to vote) with no more than one negative vote, is required to pass the examination. Members of the examining committee must vote on the performance as either pass or fail.

5. The oral examination should be completed successfully at least six months before submission of the dissertation.

Dissertation research

1. The student must conduct a substantial original investigation under the supervision of the permanent adviser and prepare a dissertation reporting the results of this research and analyzing its significance in relation to existing scientific knowledge.

2. The body of experimental work to be incorporated into the dissertation is subject to the approval of the membership of the student advisory committee. The advisory committee should, therefore, be formally consulted as the research project nears completion to ensure that there is agreement with respect to the material deemed necessary and sufficient for incorporation into the dissertation. Such consultation will normally occur in the form of a meeting of the advisory committee with the student. The faculty adviser has a responsibility to advise the student when the meeting of the advisory committee for this purpose should take place.

3. The dissertation is prepared in an acceptable form and style with the counsel of the faculty adviser. The faculty adviser determines when the dissertation document can serve as the basis for the final oral examination (or dissertation defense). With the approval of the faculty adviser, the final oral examination by the advisory committee is scheduled and the dissertation document is distributed to the advisory committee. Distribution of the dissertation document to the advisory committee will usually occur at least 10 working days in advance of the final oral examination. The Office of Graduate Education is informed of the scheduling of the final oral examination 10 working days in advance of the examination. The Office of Graduate Education will then post an announcement of the final oral examination to include the name and department of the candidate together with the title of the dissertation and the day, place and time of the final oral examination.
4. The final oral examination is conducted by the student advisory committee at a specified time and place, is chaired by the faculty adviser and is open to all members of the faculty. The subject matter of the examination is limited to the content of the candidate’s dissertation and related areas. A favorable vote of the advisory committee with no more than one negative vote shall be required to indicate that the candidate has passed the final oral examination. All advisory committee members must vote. The outcome of the final oral examination is reported to the Office of Graduate Education. If the examination is not passed, the Student Advisory Committee must recommend a course of action for the student. The committee might, for example, recommend that a re-examination be scheduled, or that a major revision of the dissertation (including added data collection and/or analysis) be required prior to rescheduling of the examination, or that the student be terminated from the program or other action as deemed appropriate by the committee. A majority of the committee membership must concur in the recommended course of action. The recommendation must be communicated in writing to the appropriate graduate program director for approval within five working days of the examination. The program, acting through the graduate program director, shall accept the recommendation of the committee or determine an alternative within an additional five working days. The course of action approved by the program will be communicated in writing to the student by the graduate program director. The graduate program director shall inform the Office of Graduate Education of the School of Medicine in writing as to the action taken.

If a re-examination is the recommended course of action, a representative of the MCV Campus Graduate Committee will be appointed to serve as the chair of the examining committee.

5. The student advisory committee approves the dissertation document as acceptable following the final oral examination. Approval of the dissertation as acceptable is indicated by the signature of all members of the advisory committee on the signature page of the dissertation. Approval of the dissertation by the advisory committee must be unanimous.

Nondegree-seeking students

Students not admitted to a degree program must obtain permission from the course director before being allowed to register for courses.

Summer registration

Graduate students are expected to devote six or more weeks during the summer to full-time research. Students registered for research credit are billed at the established tuition rate.
School of Medicine

Post-baccalaureate Pre-medical
Basic Health Sciences Certificate

This program is designed as a two-semester didactic program offering six departmentally based curricula in the basic sciences. Curricula consist of a total of 27 credit hours of graduate courses offering students an advanced level of training in subject areas critical to professional (M.D., D.D.S.) degree programs. The certificate degree is offered by the departments of Anatomy, Biochemistry, Human Genetics, Microbiology and Immunology, Pharmacology and Toxicology, and Physiology.

Completion of the program and awarding of the certificate degree requires that students complete a minimum of 27 credit hours of course work, maintaining an overall GPA of 3.0. Course requirements and elective options are defined by the departments.

The program has been structured on a disciplinary basis to allow the accumulation of didactic credit hours which may be applicable to advanced degree training at the M.S. or Ph.D. level in programs offered by the departments of the school. Students interested in this potential option must formally apply to the program of interest.

Enrollment in and/or completion of the program is not a guarantee of admission to either the M.D. or advanced-degree programs offered by VCU. However, the curricula have been structured with the counsel of the Office of Admissions of the VCU School of Medicine to offer training that enhances performance on standardized admissions tests and provides a grounding applicable to a variety of career options.
Combined M.S./Ph.D. and D.D.S. degree programs

In cooperation with the School of Dentistry, students in dentistry with an interest in academic and research careers are afforded the opportunity to undergo advanced-degree training while in dental school or residency. Admission of students enrolled in the School of Dentistry to combined degree programs is processed through the Office of Graduate Education of the School of Medicine by established procedures. The Dental Aptitude Test may be accepted in lieu of the GRE as an admission requirement. No application fee is required of students already regularly enrolled as degree-seeking graduate students at the university.

The requirements for a combined professional school/graduate school degree in basic health sciences are equivalent to those required of students seeking a graduate degree alone and are determined by the individual departments. A time limit of five calendar years for the M.S. and seven calendar years for the Ph.D. degree, beginning at the time of first registration in the graduate school, applies to work to be credited toward degrees for students in combined programs.
School of Medicine

Interdisciplinary Ph.D. programs

The School of Medicine offers interdisciplinary advanced-degree training in neuroscience, and molecular biology and genetics. Training in neuroscience links the departments of Anatomy and Neurobiology, Biochemistry, Pharmacology and Toxicology, and Physiology, providing didactic and research training reflecting the complementary interests of faculty across traditional disciplines. Training in molecular biology and genetics partners the departments of Biochemistry, Human Genetics, Microbiology and Immunology, and Pharmacology and Toxicology in a comparable fashion. Both approaches to training afford students the opportunity to identify prospective research projects with faculty whose expertise lies in these emerging areas of biomedical science in the departments respectively identified previously.

The schools of Medicine and Allied Health Professions offer Ph.D. programs in physical therapy and in anatomy/physical therapy and physiology/physical therapy. These research degrees are planned primarily as physical therapy faculty development programs; other needs may be met for individual students. Interested physical therapists should contact the departments of Anatomy and Neurobiology or Physiology for details.
Combined M.D./Ph.D.

The M.D./Ph.D. Program seeks to prepare physician-scientists for careers that encompass aspects of health care ranging from the discipline of basic investigation to patient care. The program begins two months prior to the first year of medical school. These students arrive on campus for orientation and complete two laboratory rotations before the start of medical school classes. They complete the first two years of medical school and, after taking the first part of the U.S. National Medical Licensing Examination, enter a Ph.D.-granting department as a graduate student. Each student must meet the Ph.D. requirements of his or her department for course work, examinations and research. Many of the medical school courses will provide credits for the graduate phase, but students also must take additional graduate-level courses as determined by the dissertation adviser and advisory committee. The main undertaking at this phase is laboratory research that leads to the Ph.D. dissertation. After completion of doctoral degree requirements, students move to the clinical year of medical school. Students may begin their clinical year of medical school immediately after completion of doctoral (Ph.D.) requirements, regardless of the time in the calendar year, and, 14 months later, may complete their medical school requirements. These students are exempt from the major part of the fourth year of medical school.

Prospective students submit applications through the American Medical College Application Service (AMCAS). Upon review of the AMCAS documents, qualified applicants are sent supplemental admission materials, including an application for the M.D./Ph.D. Program. Those invited to Richmond for interviews will take part in the standard interview for the School of Medicine and also will meet with the director of the M.D./Ph.D. Program and one or more academic members of the M.D./Ph.D. Committee.

Admission of medical students regularly enrolled in these schools to the combined degree program is processed through the Office of Graduate Education of the School of Medicine by established procedures. The Medical College Admission Test or Dental Aptitude Test may be accepted in lieu of the GRE. Undergraduate transcripts and references are obtained from the professional school. No application fee is required of students already regularly enrolled as degree-seeking graduate students at the university.

The requirements for a combined professional school/graduate school degree in the School of Medicine are equivalent to those required of students seeking a graduate degree alone and are determined by the individual departments. A time limit of seven calendar years for the Ph.D. degree, beginning at the time of first registration in the graduate school, applies to work to be credited toward degrees for students in combined programs.
Combined M.D./M.P.H. and M.D./M.H.A. programs

The School of Medicine has joint programs combining the M.D. degree with the Master of Public Health degree offered by the Department of Preventive Medicine and Community Health (School of Medicine) or the Master of Health Administration degree offered by the Department of Health Administration (School of Allied Health Professions).

Students may indicate their interest in either combined program prior to matriculation or during the first two years of the M.D. program. Availability of training in either master’s program may be limited.

Students interested in either program may contact the School of Medicine Office of Curriculum or (as appropriate) the Department of Health Administration (School of Allied Health Professions) or the Department of Preventive Medicine and Community Health (School of Medicine).

For additional information refer to the School of Medicine handbook available on the school’s Web site at http://www.medschool.vcu.edu.

M.D. and M.P.H. Program

The objective of the coordinated M.D./M.P.H. Program is to provide high quality and in-depth training in public health to qualified medical students. The program includes four years of medical school (M-I, M-II, M-III and M-IV) and one year of didactic and practical study in the M.P.H. Program. After successful completion of M-III, the student starts the M.P.H. graduate program, returning to complete M-IV medical studies after one year of full-time matriculation in the M.P.H. Program. The final year of the M.D./M.P.H. Program is the clinical M-IV year of preparation for internship and residency.

Since enrollment into the coordinated M.D./M.P.H. Program requires admission into both the School of Medicine and the Graduate School, each student must apply and be formally accepted into the M.P.H. Program. Students must successfully complete all required course work to be awarded the M.P.H. degree.

M.D. and M.H.A. Program

For the M.H.A. combined degree program, course work extends into a second year and is taken during the final year of the M.D. program.
Graduate medical education

Clinical training leading to qualification for certification by the American specialty boards is offered in the following programs: general surgery, vascular surgery, thoracic surgery, urology, allergy and immunology, anesthesiology, clinical genetics, dermatology, emergency medicine, family practice, internal medicine, neurosurgery, neurology, child neurology, obstetrics/gynecology, ophthalmology, orthopedic surgery, otolaryngology, pathology, forensic pathology, neuropathology, pediatrics, pediatric cardiology, pediatric allergy and immunology, pediatric hematology and oncology, nuclear medicine, neonatal-perinatal medicine, physical medicine and rehabilitation, plastic surgery, psychiatry, diagnostic radiology, radiation oncology, therapeutic radiology, oral surgery, public health, and preventive medicine.

Programs sponsoring a PGY-1 year (internship) are internal medicine, surgery, family medicine, obstetrics/gynecology, pathology, pediatrics, anesthesiology, psychiatry, diagnostic radiology and neurology.

Requests for further information should be directed to the program of interest or the Associate Dean for Graduate Medical Education, School of Medicine, Virginia Commonwealth University, P. O. Box 980257, Richmond, VA 23298-0257.

Continuing medical education

Mission statement

The primary goal of the VCU Office of Medical Education is to provide continuing educational experiences specifically designed to enhance the delivery of high quality patient care by physicians and other health care professionals in Virginia and other states. The philosophy of continuing medical education is based on the belief that learning must be viewed as a lifelong process. In past generations, the graduating physician was able to look upon an acquired knowledge base as a reasonably stable resource for practicing medicine. However, today's rapidly expanding load of scientific information forces a continuing learning effort upon the physician. Undergraduate and graduate medical education alone can no longer offer reasonable assurance that practitioners are armed with the knowledge, attitudes and skills that will enable them to render optimal, achievable patient care throughout their careers. Continuing education is now linked with undergraduate and graduate education to complete the continuum of medical
education.

The goal and philosophy stated herein undergird and lend direction to the effort of the Office of Medical Education as it engages in a diversity of educational and education-related activities. Specifically, the Office of Medical Education works in concert with the faculty of the School of Medicine, as well as other individuals and organizations as appropriate, to:

1. coordinate a statewide continuing medical education program for several networks of affiliate hospitals,
2. organize the Virginia Hospital Television Network and provide continuing education programs for physicians and other health professionals directly into hospitals statewide, using satellite and audio-conferencing,
3. develop and deliver a series of short courses, clinical workshops, seminars, international medical study tours and conferences for physicians and other health professionals,
4. provide clinical refresher courses and make readily available self-learning materials and methods,
5. conduct research to improve the process of continuing medical education, and
6. improve the education of the general public in the proper use of health care resources.

Fostering an appreciation for the concept of lifelong learning in undergraduate and graduate medical school programs is a challenge that is now being confronted by medical schools throughout the nation. During these critical years, the attitudes of medical students toward continuing pursuits of learning are molded and developed. In order to encourage undergraduate and graduate students at VCU to embrace the concept of lifelong learning, the Office of Medical Education actively seeks their involvement in its various programs and activities. Brochures, posters and a yearly catalog are utilized to announce pending events.

Further information may be obtained by writing the Assistant Dean for Continuing Education, School of Medicine, Virginia Commonwealth University, P.O. Box 980048, Richmond, VA 23298-0048.

**Grading and promotions**

Each student’s progress toward his/her objectives is evaluated by examination in each area of subject matter and by national board examinations at appropriate times. Grades are assigned as honors, high-pass, pass, marginal or fail. Students receiving marginal or fail grades are counseled. All students are assigned a faculty adviser, available to the student throughout the four years of study.

Students who have attained satisfactory grades in M-I and M-II, but who do not pass U.S. Medical Licensing Examination Step 1, may receive time to study the basic medical sciences during the third school year, prior to their repeating the Step 1 examination. These students will use part of their fourth year to complete the segments omitted during the study time.

At the close of each academic year, the Promotions Committee, composed of department chairs, recommends to the dean which students have achieved the objectives of the year and which students are qualified for either promotion or graduation. The Promotions Committee is charged...
to give careful individual attention to all aspects of student achievement, effectiveness, behavior and attitude. The committee is charged not to promote any student who has failed to meet the requirements of the preceding year or who appears unfit for the practice of medicine. When the committee determines by majority vote that a student will not be promoted, it then recommends to the dean remedial activities or dismissal in instances where no remedy is perceived. The dean reviews the recommendations and promptly notifies students that they have been promoted, have to repeat a year or have been dismissed. A student repeating the year is expected to show significant improvement. The Promotions Committee also will meet each January to review the status of all senior students, all third-year students and M.D./Ph.D. candidates. At this meeting, the committee also will review any other students in serious academic difficulty and may choose to take final action, including dismissal, on such students.

An Appeals Committee of three senior faculty members will hear appeals of dismissals when such are filed in writing within 14 days of the student’s notice of dismissal. A student also may appeal a decision to repeat a year, but such appeals will be reviewed by the Appeals Committee only when it is found that the student will present information not previously available to the Promotions Committee. A student appealing has the right to appear before the Appeals Committee and to have an adviser participate. The dean of the School of Medicine will act upon the recommendation of the Appeals Committee within 14 days of receipt of the committee’s recommendation.

Withdrawal

A student may not withdraw from school prior to completion of an academic year unless granted a leave of absence by the dean. A student who leaves without such permission or who fails to return by the end of the granted term of leave is considered dismissed from the class and may return only by applying for possible readmission. Where such a student has demonstrated any academic deficiency, the application is presented to the Promotions Committee.

Requirements for graduation

The degree of Doctor of Medicine will be conferred by VCU upon candidates who, in the opinion of the medical faculty, have:

1. attained the school’s educational objectives as evidenced by satisfactory completion of prescribed courses and examinations, by proven clinical skills and responsibilities, and by ethical standards,

2. taken Step 1, Step 2CK and Step 2CS of the U.S. Medical Licensing Examination before graduation (April of the M-IV year),

3. attended the School of Medicine for a minimum of two years, one of which must be an academic year of clinical rotations, and

4. discharged all financial obligations to the university.

It is the policy of the School of Medicine that candidates must be present at commencement exercises unless excused by the dean.
School of Medicine

Doctor of Medicine program (M.D.)

Admissions

The School of Medicine participates in the American Medical College Application Service. The AMCAS application forms can be obtained from AMCAS, 2450 N. St., N.W., Washington, D.C. 20037-1126. The electronic application is available at http://www.aamc.org/students/amcas/. Updated information is available at the School of Medicine Web site: http://www.medschool.vcu.edu.

Application for the School of Medicine should be made on or after June 1 of the year preceding intended matriculation. Updated information is available on the school’s Web site: http://www.medschool.vcu.edu. The closing date for filing applications for this institution is Nov. 1 of the year preceding the enrollment date. Priority for admissions is given to Virginia residents. Candidates from populations who are traditionally medically underserved are encouraged to apply. Students previously dismissed from a medical school will not be considered. All applicants must be U.S. citizens or permanent residents of the United States at the time of application.

A nonrefundable $80 application fee and supplemental information, including faculty recommendations, will be required with all applications accepted for further consideration. The final date for returning supplemental information is Dec. 1 of the year preceding possible enrollment in the School of Medicine, or two weeks after supplemental materials are requested.

The School of Medicine will not admit students from other health sciences schools at VCU until such students have completed the degree program for which they are enrolled.

The School of Medicine participates in the Early Decision Plan. This program permits an applicant to file a single application through AMCAS on or after June 1 but prior to Aug. 1. All applicants filing under the Early Decision Plan will receive consideration for admission and a response on or before Oct. 1. All applications for the Early Decision Plan must be supported by the results of the new MCAT test at the time the application is made.

The early notification date of this plan ensures that those who are unsuccessful have ample time to request further distribution of their applications to other medical schools. Further information on the Early Decision Plan is available at http://www.aamc.org/amcas/deadlines.htm.

Requirements for entrance

The MCAT is required as part of the application. It is necessary that the test be taken no later than the fall of the year of application since selections will be complete before the spring test is given in the year of admission. This test is produced by the American College Testing Program, P.
O. Box 414, Iowa City, IA 52240, and is administered in colleges and universities throughout the
country. Information about the MCAT is available through premedical advisers or directly from
the American College Testing Program.

Applicants may be admitted on the basis of 90 semester hours of outstanding achievement;
however, the majority of students admitted are completing their baccalaureate programs. The
college major for premedical students should be selected in accordance with the individual
student’s aptitude and interest. The prerequisites for the School of Medicine have been reduced
to a minimum in order to permit the widest possible latitude in preparation for medical education.

Prerequisites for admission include a minimum of 90 semester hours (or the equivalent) in a U.S.
or Canadian college or university accredited by the regional accrediting agency. This program of
study must include a minimum of:

1. English – two semesters (one semester to include grammar and composition);
2. college mathematics – two semesters;
3. biological science (eight semester hours) including laboratory experience. This
   requirement may be satisfied by general biology, general zoology or botany. No more
   than half may be botany;
4. general or introductory chemistry (eight semester hours) including laboratory. An
   appropriate portion of this requirement may be met by courses in analytical chemistry or
   physical chemistry;
5. organic chemistry (six semester hours) including laboratory. This course should be
   equivalent to and acceptable for continued studies in a chemistry major; and
6. general or introductory physics including laboratory experience (eight semester hours).

Students are encouraged to pursue their own intellectual interests in college in order to obtain a
broad education consistent with their major program. Courses in medically related science areas
will not relieve the student of his/her responsibility for these subjects in the medical curriculum.

Selection factors

Demonstrated academic ability, as well as attributes of character and personality, are of
significance to the admissions committee in the selection process. A review of academic
achievement as represented by the standard academic record and summaries, MCAT scores,
evaluations and interviews are all sources of information on which the comparative evaluation
process is based. A review of the completed application file and interviews with members of the
admissions committee are an integral part of the admissions process.

Noncognitive variables also are sought in all candidates. These qualities include, but are not
limited to, health care experience, community service and social concern, communication skills
both written and oral, leadership, ethical and moral behavior, creativity, compassion and
empathy, altruism, personal maturity, self-confidence without arrogance, appropriate motivation,
the ability to realistically self-appraise, and a demonstrated ability to work as a team member.
These qualities and characteristics are judged by references within the letters of recommendation
and from a careful review of the student’s essays and extracurricular activities, as well as the
interviewers’ assessment during the interview.
The School of Medicine hopes to create a learning environment where students will meet colleagues whose life experiences and views differ significantly from their own. A physician must be at home and at ease in a wide variety of environments and with a wide variety of people. Students frequently comment that the aspect of the school they appreciate most is the diversity of their class. The admissions process seeks to foster that diversity of perspective and background by admitting students from a wide range of backgrounds — socioeconomic, cultural, geographic and educational.

The interview is an opportunity for the applicant to become acquainted with the institution and it offers additional information for the selection process. Only on-campus interviews in Richmond are available. Each year more applicants are interviewed than can be accepted in the class. Therefore, an interview is not an indication of acceptance to the School of Medicine.

Offers for admission are made as previously indicated in the Early Decision Plan and on the uniform acceptance date of Oct. 15, with admissions occurring at several points thereafter until the class selections have been completed. At the time the class is filled, an alternate list of applicants is compiled from which replacements are drawn for any vacancies that may occur in the selected class between notification and the third week of class attendance.

Since selections are made in advance of actual attendance, all acceptances are made on condition of satisfactory completion of courses planned or in progress. It is expected that candidates will maintain acceptable standards of deportment and ethical behavior. Students offered acceptance into a class are expected to respond within two weeks of the offer. If such a response presents a problem, extension of the time for the response should be requested.

The enrollment of accepted candidates is considered complete only after payment of the $100 deposit toward the first tuition payment. This deposit will be returned to the candidate should withdrawal occur prior to May 15 of the year of attendance. By the act of matriculation into the School of Medicine, the student accepts the responsibilities related to this opportunity and agrees that during the time that he/she is a registered student he/she will follow the rules and regulations established by the governing bodies of the School of Medicine and the university.

**Transfer in advanced standing**

Advanced standing admission is open only to students who previously have not been dismissed from any medical school and who are in good standing in LCME-accredited American or Canadian medical schools. Transfers are only at the third-year level and are limited in number each year. Interested students should request information between Jan. 1 and Jan. 15 of the year they wish to transfer. Such individuals must pass Step 1 of the U.S. medical licensing examination prior to matriculation.

Application materials and further information may be obtained by writing to Admissions, School of Medicine, Virginia Commonwealth University, P.O. Box 980565, Richmond, VA 23298-0565.

U.S. citizens in foreign medical schools recognized by the World Health Organization may apply for admission only to the first-year class through AMCAS.
Curriculum

The program for the M.D. degree is divided into four phases, each of one year’s duration. Medicine I, occupying the first year (mid-August to early June), emphasizes normal human structure, function, growth and development. Medicine II, occupying the second year (August to June), stresses the abnormal. Medicine III occupies the third year (July to July) and consists of clinical education and training. Medicine IV, lasting from August to mid-May, consists of approximately one-third required clinical education and training and approximately two-thirds electives at the VCU Health System’s MCV Hospitals and at approved medical schools elsewhere in the United States and abroad. Elective opportunities also are offered in M-I and M-II.

School of Medicine students begin their clinical exposure in the first month of medical school in the Foundations of Clinical Medicine course. This longitudinal experience runs throughout the first two years and consists of one afternoon session per week in a private primary care physician’s office, alternating with one afternoon per week in a small group session. This course gives the student the opportunity to learn the clinical relevance of basic science material and to work with a primary care role model. The course provides a fundamental understanding of the skills necessary for all clinical disciplines.

Registration in courses offered by the School of Medicine is restricted to students enrolled in the School of Medicine at VCU.

Medicine I, II and III

The curriculum is viewed as a dynamic and evolving entity; courses, titles, content or duration of emphasis may be subject to modification for the sake of improving the learning experience.

Each course in M-I and M-II is designed and implemented by the faculty, and each year of the curriculum is supervised by a faculty coordinator. In M-III, a committee under a coordinator supervises the clinical experiences, and in M-IV there is an electives committee whose chair is the M-IV coordinator.

Medicine I Courses
Medical Biochemistry
Histology
Gross and Developmental Anatomy
Physiology
Human Genetics
Behavioral Sciences
Population Medicine
Neurosciences
Foundations of Clinical Medicine
Immunology
Medical Ethics

Medicine II Courses
Pathogenesis
The School of Medicine, in an effort to best serve the needs and goals of the individual student, offers M-IV students the option of choosing electives during two-thirds of their senior year. The elective curriculum has been arranged primarily to allow those students who have definite goals to pursue them logically without adherence to a required curriculum. At the same time, it allows those who have not yet defined their goals an adequate assortment of electives with which to explore career options. Where standard elective choices seem too limiting, students are encouraged to approach individual faculty members relative to the development of unique courses that more closely approach individual needs. A member of the M-IV Committee is available to advise each student and to approve each student's program.

The year is divided into nine four-week periods. The required rotations, which must be served at the MCV Campus, are an acting internship and completion of the Update of Basic Sciences and Clinical Medicine course. The first month of M-IV is divided into a two-week required Step II board review course and a two to three-week vacation.

An updated electives catalog is available on the School of Medicine Web site.

All students are required to take the U.S. Medical Licensing Examination Step 1 prior to the start of M-III, Step 2CK in the fall of M-IV and Step 2CS by the spring of M-IV. Any exceptions to this requirement must be approved by the senior associate dean for medical education.
Combined M.D./Ph.D.

The M.D./Ph.D. Program seeks to prepare physician-scientists for careers that encompass aspects of health care ranging from the discipline of basic investigation to patient care. The program begins two months prior to the first year of medical school. These students arrive on campus for orientation and complete two laboratory rotations before the start of medical school classes. They complete the first two years of medical school and, after taking the first part of the U.S. National Medical Licensing Examination, enter a Ph.D.-granting department as a graduate student. Each student must meet the Ph.D. requirements of his or her department for course work, examinations and research. Many of the medical school courses will provide credits for the graduate phase, but students also must take additional graduate-level courses as determined by the dissertation adviser and advisory committee. The main undertaking at this phase is laboratory research that leads to the Ph.D. dissertation. After completion of doctoral degree requirements, students move to the clinical year of medical school. Students may begin their clinical year of medical school immediately after completion of doctoral (Ph.D.) requirements, regardless of the time in the calendar year, and, 14 months later, may complete their medical school requirements. These students are exempt from the major part of the fourth year of medical school.

Prospective students submit applications through the American Medical College Application Service (AMCAS). Upon review of the AMCAS documents, qualified applicants are sent supplemental admission materials, including an application for the M.D./Ph.D. Program. Those invited to Richmond for interviews will take part in the standard interview for the School of Medicine and also will meet with the director of the M.D./Ph.D. Program and one or more academic members of the M.D./Ph.D. Committee.

Admission of medical students regularly enrolled in these schools to the combined degree program is processed through the Office of Graduate Education of the School of Medicine by established procedures. The Medical College Admission Test or Dental Aptitude Test may be accepted in lieu of the GRE. Undergraduate transcripts and references are obtained from the professional school. No application fee is required of students already regularly enrolled as degree-seeking graduate students at the university.

The requirements for a combined professional school/graduate school degree in the School of Medicine are equivalent to those required of students seeking a graduate degree alone and are determined by the individual departments. A time limit of seven calendar years for the Ph.D. degree, beginning at the time of first registration in the graduate school, applies to work to be credited toward degrees for students in combined programs.
Combined M.D./M.P.H. and M.D./M.H.A. programs

The School of Medicine has joint programs combining the M.D. degree with the Master of Public Health degree offered by the Department of Preventive Medicine and Community Health (School of Medicine) or the Master of Health Administration degree offered by the Department of Health Administration (School of Allied Health Professions).

Students may indicate their interest in either combined program prior to matriculation or during the first two years of the M.D. program. Availability of training in either master’s program may be limited.

Students interested in either program may contact the School of Medicine Office of Curriculum or (as appropriate) the Department of Health Administration (School of Allied Health Professions) or the Department of Preventive Medicine and Community Health (School of Medicine).

For additional information refer to the School of Medicine handbook available on the school’s Web site at http://www.medschool.vcu.edu.

M.D. and M.P.H. Program

The objective of the coordinated M.D./M.P.H. Program is to provide high quality and in-depth training in public health to qualified medical students. The program includes four years of medical school (M-I, M-II, M-III and M-IV) and one year of didactic and practical study in the M.P.H. Program. After successful completion of M-III, the student starts the M.P.H. graduate program, returning to complete M-IV medical studies after one year of full-time matriculation in the M.P.H. Program. The final year of the M.D./M.P.H. Program is the clinical M-IV year of preparation for internship and residency.

Since enrollment into the coordinated M.D./M.P.H. Program requires admission into both the School of Medicine and the Graduate School, each student must apply and be formally accepted into the M.P.H. Program. Students must successfully complete all required course work to be awarded the M.P.H. degree.

M.D. and M.H.A. Program

For the M.H.A. combined degree program, course work extends into a second year and is taken during the final year of the M.D. program.
School of Nursing

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.

Clinical facilities

A variety of urban and rural agencies, including community medical centers and state hospitals, public health services, private clinics and offices, federal and state centers and departments are available for clinical study. These facilities provide generalized and specialized inpatient and ambulatory services. 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.

Nondegree-seeking students

Students who have not been admitted to a graduate program in nursing may be permitted, at the discretion of the School of Nursing, to enroll in individual courses. Only six credits earned as a nondegree-seeking student can be applied to the master’s or doctoral degree. Only three credits earned as a nondegree-seeking student can be applied to the post-master’s certificate.

Enrollment

Students may begin study during summer and fall semesters. Students will have an academic adviser appointed and will follow the standard program of study. Once admitted, students are expected to abide by enrollment policies of the Graduate School.

Transfer credit

Students may take 12 of the required credits for the respective program at another institution.
and transfer them to VCU. The School of Nursing will determine the acceptability of courses for transfer credit. Transcript evidence and description of courses are required for review of transfer credit.

Scholarships, grants and loans

Applications for financial assistance must be filed for all forms of financial assistance, including traineeships. A Free Application for Federal Student Aid (FAFSA) 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 form for financial assistance from the Office of Financial Aid.
Master of Science in Nursing

The graduate program in nursing is based on the goals and the philosophy of the university and the School of Nursing. Differentiation between the undergraduate and the graduate programs is reflected in the philosophy and purpose of graduate education, the characteristics of the graduates and the program objectives. The graduate program is designed to respond to national nursing needs through creative, flexible approaches to graduate nursing education.

Graduate education is professionally oriented and has three major thrusts: (1) integration of three processes including transmission, utilization and development of knowledge in an advanced practice area, (2) development of increased skill in application of knowledge to advanced practice and (3) development of an awareness of the interaction between social, cultural, political and economic forces that have an impact on nursing practice in complex health care delivery systems. Advanced study emphasizes analysis and synthesis of knowledge from nursing and related disciplines with systematic investigation of underlying concepts. Graduates of this program should integrate this new knowledge into nursing practice. Graduates should occupy pivotal roles to improve health care and influence health policy in political arenas. With these three thrusts, graduates of this program have a knowledge base for further research and doctoral study.

Graduate education is directed toward professional practitioners who are self-directed in setting educational goals and in determining learning strategies best suited for their cognitive styles. With guidance and direction, adult learners should be able to integrate past experiences with current learning situations to expand their approaches to problem solving. Graduate education permits greater autonomy in more diverse environments for learning and practice including the political arena, all levels of the health care delivery system and community agencies whose missions are directed toward meeting the health needs of their clients. The graduate program in nursing:

- prepares nurses for advanced practice in an area of specialization utilizing their own conceptual framework, constructed through advanced study,
- prepares nurses for advanced practice in an increasingly technological society,
- develops leadership skills in an advanced practice area and
- provides a foundation for further research and scholarly study.

The School of Nursing offers programs of study leading to the Master of Science degree. Concentrations combining major study in advanced practice nursing are:
Accreditation

The master’s degree program in nursing is accredited by the National League for Nursing Accrediting Commission, 61 Broadway, 33rd Floor, New York, NY 10006; (800) 669-1656, ext. 153.

Admission requirements and procedures

The purpose of the following admission requirements and procedures is to encourage applications from competent students and to ensure selection of those whose ability, education and motivation qualify them to pursue successful graduate study in nursing.

To be considered for admission, an applicant must have:

- a Bachelor of Science in Nursing from an NLN-accredited school or a baccalaureate degree in another field with a lower division nursing education (associate degree or diploma). Applicants who hold a baccalaureate degree in another field who are not registered nurses are eligible for admission to the accelerated second degree program (entry-level master’s program). Applicants for this track are admitted to the graduate program and pay graduate fees.

- transcripts reflecting completion of undergraduate courses in statistics, research and health assessment (health assessment not required for accelerated second degree students). In addition, all nursing administration students are required to have undergraduate courses in accounting and economics or microeconomics. Economics and accounting may be taken after admission for students enrolled in part-time study. Additional prerequisites for the accelerated second degree option are five to eight credit hours of anatomy and physiology, three credit hours of developmental psychology and six credit hours of English composition (or satisfactory completion of the writing requirements of the student’s undergraduate program).

- acceptable scores on the Graduate Record Examination (GRE) general test. Scores cannot be older than five years.

- TOEFL scores of greater than 550 for international students.

- a current unrestricted registered nurse license in a state, Washington, D.C., or a U.S. possession or territory, or an equivalent credential in another country. For accelerated second degree students, license is required within 90 days after completion of bachelor’s degree in nursing in order to remain enrolled in graduate courses.

- passing scores on the Qualifying Exam of the Commission on Graduates of Foreign Nursing Schools (CGFNS) prior to application if he or she is a graduate of foreign nursing school licensed outside of the United States. (Include the exam report in the application materials.)
references from the applicant’s undergraduate program and from employers/supervisors.

● a personal interview (if requested).

Professional liability insurance is highly recommended.

Application forms and instructions for applying to all graduate programs are available on the Graduate School Web site at http://www.vcu.edu/graduate.

Additional program information and advisement can be obtained through the Office of Enrollment and Student Services, 1220 E. Broad St., P.O. Box 980567, Richmond, VA 23298-0567; phone (804) 828-5171 or toll free (800) 828-9451; fax (804) 828-7743; e-mail: vcu_nurse@hsc.vcu.edu or visit the School of Nursing Web site: http://www.nursing.vcu.edu.

Applications are reviewed by the School of Nursing. Applicants will be notified of action by the dean of the Graduate School. Applicants who are granted provisional admission are responsible for satisfying the provision or may be subject to dismissal. Applicants should accept an admission offer in writing and submit a tuition deposit as instructed in their admission letters. The tuition deposit is not refundable, but will be applied to tuition during the first semester of enrollment in courses.

Graduation requirements

To be a candidate for the degree of Master of Science in Nursing, students must be recommended by the faculty and must:

● meet academic requirements of the Graduate School,

● complete all requirements for the prescribed curriculum within five calendar years of the first registration for work to be credited toward the degree,

● earn at least a “B” or pass grade in all nursing courses,

● earn at least a cumulative average of 3.0 in all work presented for graduation and

● conform to School of Nursing policies in respect to pass/fail grading for course work or thesis study.

The degree will be granted only after all requirements have been fulfilled, all fees to the university have been paid and bound copies of the thesis have been submitted. Degrees are not granted in absentia unless written request is made to the dean and permission is granted.

Academic requirements

● A student may not proceed in the program with a GPA of less than 3.0 or with a grade of less than “B” in any nursing course. In exceptional circumstances, an appeal for progression may be made to the Graduate Curriculum and Evaluation Committee. Students earning less than a “C” are referred to policy 6.4.1 in the School of Nursing Policy and Information Handbook (http://www.nursing.vcu.edu/faculty/policy.htm).

● An adviser for each student is appointed by the department chair. That adviser will assist the student in program and career planning, registration procedures, and certification for graduation.

● The departments of Adult Health Nursing, Integrative Systems and Maternal Child Health
Nursing will assist respective students with advanced practice certification.

- Following are the requirements for students electing the thesis option:

  Committee formation:
  - With the approval of the department chair, the student selects a thesis committee of not fewer than three university faculty. One member must be outside the major department and may be outside the School of Nursing.
  - The student selects the committee chair from School of Nursing graduate faculty, but not necessarily from the student’s major department.
  - The student provides each member of the committee with a copy of the thesis in accordance with the Graduate School Thesis and Dissertation Manual.

  Committee responsibilities:
  - The committee monitors the design and conduct of the research and the preparation of the thesis.
  - The committee serves as the examining committee for the thesis.
  - Committee members read and approve the thesis and participate in the final oral examination of the student. The final examination is open to faculty and students. The time and place, together with the candidate’s name, department and thesis title, shall be announced in the School of Nursing 10 days in advance of the examination.

  Outcome:
  - Each member of the examining committee will attend and cast a vote.
  - A favorable vote of the examining committee with no more than one negative vote shall be required to pass the oral examination.

Master of Science degree program requirements in nursing

Clinical practice concentrations

<table>
<thead>
<tr>
<th>Core courses</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 501 Advanced Professionalization I</td>
<td>1</td>
</tr>
<tr>
<td>NURS 502 Advanced Nursing Practice: Pharmacotherapeutics</td>
<td>3</td>
</tr>
<tr>
<td>NURS 503 Advanced Nursing Practice: Psychosocial</td>
<td>3</td>
</tr>
<tr>
<td>NURS 504 Advanced Nursing Practice: Biological</td>
<td>3</td>
</tr>
<tr>
<td>NURS 508 Advanced Nursing Practice: Systems</td>
<td>3</td>
</tr>
<tr>
<td>NURS 509 Advanced Nursing Practice: Community*+</td>
<td>3</td>
</tr>
<tr>
<td>NURS 511 Health Assessment for Advanced Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 512 Advanced Nursing Science</td>
<td>3</td>
</tr>
<tr>
<td>NURS 601 Advanced Professionalization II</td>
<td>1</td>
</tr>
</tbody>
</table>

* Adult Health Clinical Nurse Specialist students select 509.
+ Child health students substitute IDDS 600 Interdisciplinary Studies in Developmental Disabilities: Teamwork in Serving Persons with Developmental Disabilities

Concentration courses

<table>
<thead>
<tr>
<th>credits</th>
</tr>
</thead>
</table>

Page 582 of 658
## Adult Health: Acute Care Nurse Practitioner

- NURS 633 Common Health Problems of Women 1
- NURS 660 Advanced Adult Health I 3
- NURS 661 Advanced Adult Health II 4
- NURS 663 Advanced Adult Health III 3

## Adult Health: Primary Care Nurse Practitioner

- NURS 633 Common Health Problems of Women 1
- NURS 660 Advanced Adult Health I 3
- NURS 661 Advanced Adult Health II 4
- NURS 663 Advanced Adult Health III 3

## Adult Health: Clinical Nurse Specialist

- NURS 660 Advanced Adult Health I 3
- NURS 661 Advanced Adult Health II and/or NURS 663 Advanced Adult Health III (depending on focus) 3-7
- NURS 687 Management Systems and Health Care Outcomes 3
- ADLT 603 Instructional Strategies for Adults 3

## Integrative Psychiatric Mental Health Nursing

- NURS 654 Nurse as Integrative Healer 3
- NURS 655 Nurse as Integrative Leader 2
- NURS 656 Integrative Mental Health Nursing: Management and Treatment of Psychopathology for Advanced Practice Nurses 3
- NURS 657 Integrative Mental Health Nursing: Contemporary Practice 3
- NURS 658 Complementary Healing Modalities 3
- NURS 659 Integrative Mental Health Nursing: Synthesis 4

## Nursing Administration and Leadership

- NURS 505 Advanced Practice Nursing: Computer and Information Technology 1
- NURS 655 Nurse as Integrative Leader 2
- NURS 680 Leading People 3
- NURS 681 Nurses as Organizational Leaders 3
- NURS 687 Management Systems and Health Care Outcomes 3
- NURS 690 Application of Financial Concepts 4
- NURS 692 Integrative Administrative Systems Practicum I 3
- NURS 693 Integrative Administrative Systems Practicum II 4
- NURS 694 Integrative Administrative Systems Practicum III 4
- Accounting elective 3

## Women’s Health Nursing

- NURS 632 Health Promotion in Women 2
- NURS 633 Common Health Problems of Women 3
- NURS 634 Advanced Practice: The Childbearing Woman 3
- NURS 661 Advanced Adult Health II 3

## Child Health Nursing

- NURS 633 Common Health Problems of Women 1
NURS 647 Health Promotion and Disease Prevention in Children 3
NURS 648 Management of Acute Problems of Children and Adolescents 3
NURS 649 Children with Special Health Care Needs 3
IDDS 600 Interdisciplinary Teamwork 3

**Family Health Nursing**
NURS 633 Common Health Problems of Women 3
NURS 634 Advanced Practice: The Childbearing Woman 3
NURS 647 Health Promotion and Disease Prevention in Children 3
NURS 648 Management of Acute Problems of Children and Adolescents 3
NURS 661 Advanced Adult Health II 3
NURS 670 Primary Care of Families 3

**Concentration practicum courses**
(varies by concentration)
NURS 622 Integrative Psychiatric Mental Health Nursing Practicum I 1-3
NURS 623 Integrative Psychiatric Mental Health Nursing Practicum II 1-4
NURS 624 Integrative Psychiatric Mental Health Nursing Practicum III 1-4
NURS 672 Child Practicum I 1-3
NURS 673 Child Practicum II 1-3
NURS 674 Child Practicum III 1-4
NURS 675 Adult Immunocompetence Practicum I 1-3
NURS 676 Adult Primary Practicum 2-6
NURS 677 Advanced Adult Primary Practicum 2-5
NURS 678 Adult Acute Practicum 2-6
NURS 679 Advanced Adult Acute Practicum 2-5
NURS 682 Women’s Practicum I 1-4
NURS 683 Women’s Practicum II 1-4
NURS 684 Family Practicum 1-4
NURS 685 Women’s Practicum III 1-5
NURS 689 Integrative Systems Practicum 10
NURS 692 Integrative Administrative Systems Practicum I 3
NURS 693 Integrative Administrative Systems Practicum II 3
NURS 694 Integrative Administrative Systems Practicum III 3

The adult health concentrations include acute and primary care. Students also may select a role; current role options are the nurse practitioner or the clinical nurse specialist. The nurse practitioner role focuses on the provision of advanced independent nursing care integrated with delegated medical diagnostic and management activities. The adult primary care nurse practitioner has a practice located in an ambulatory care setting and focuses on health promotion, risk reduction and evidence-based primary care to individual patients. The adult acute care nurse practitioner generally works in an acute care setting, often within a multidisciplinary team focused on the provision of evidence-based care to adults who are acutely ill. The sphere of influence of the nurse practitioner is that of the patient. The clinical nurse specialist focuses on advanced nursing care to a specific population of adults. The clinical nurse specialist is responsible for ensuring excellence in the delivery of nursing care to patients within that population. This includes consultation with individual patients as well as with nurses who
provide care to the patient in an acute care setting, and overall systems management to facilitate care. The site of practice is determined by the location of the patient population of interest — it may be in a primary care setting, for example, people undergoing chemotherapy. The sphere of influence of the clinical nurse specialist is threefold: patient, nursing personnel and systems/organizations.

The integrative psychiatric mental health concentration prepares graduates for roles as clinical nurse specialists/nurse practitioners in adult psychiatric mental health nursing and holistic nursing. The curriculum is designed with an emphasis on content requisite for certification by the American Nurses Credentialing Center and the American Holistic Nurses Credentialing Program. Students enrolled in the integrative psychiatric mental health concentration will have experiences that reflect both the nurse practitioner and the clinical nurse specialist roles associated with the specialty.

**R.N.-M.S. track**

The School of Nursing offers a track in the master’s program designed for students who have their R.N. licensure but have not completed the baccalaureate degree. The track includes elements of the R.N.-B.S. program and moves the student expeditiously into M.S. program course work. The student completes the general education requirements for the baccalaureate degree prior to entering the R.N.-M.S. track. The track provides the additional courses in the major required for the degree and a B.S. degree is awarded after the completion of 30 credit hours of specified course work. All concentrations in the master’s program are available to students admitted to this track.

**Admission requirements**

To be considered for admission, applicants must hold the following credentials:

- an associate degree in nursing or a diploma in nursing,
- transcripts reflecting the completion of a health assessment course comparable to NURS 261 and a community health nursing course comparable to NURS 415,
- acceptable scores on the GRE Aptitude Test, including all three components (verbal, quantitative and analytical),
- TOEFL scores of greater than 550 (paper score) for international applicants,
- a current, unrestricted registered nurse license in a U.S. state, the District of Columbia, or a U.S. possession or territory, or an equivalent credential in another country,
- passing scores on the Qualifying Exam of the Commission on Graduates of Foreign Nursing Schools (CGFNS) prior to application if a graduate of foreign nursing schools that are licensed outside of the United States (include the exam report with their application materials),
- professional liability insurance (highly recommended), and
- personal interview (upon request).

**Prerequisite courses**

The following courses will be accepted in transfer, only upon a rigorous evaluation of each course
for comparability to the B.S. course using defined criteria developed by expert faculty in community health and health assessment. Applicants must provide a copy of the course syllabus and a written statement of how the course met the objectives of the VCU courses. VCU course objectives will be provided to applicants. Otherwise the following courses will be taken as prerequisites for beginning the R.N.-M.S. track:

- NURS 261 Health Assessment or comparable course (two to three credits)
- NURS 415 Community Health Nursing or comparable course (three credits)

**General education requirements (taken prior to admission to the R.N.-B.S. track)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications</td>
<td>6</td>
</tr>
<tr>
<td>Writing or composition</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>12</td>
</tr>
<tr>
<td>Philosophy, ethics, logic or critical thinking</td>
<td>3</td>
</tr>
<tr>
<td>Visual or performing art</td>
<td>3</td>
</tr>
<tr>
<td>General humanities</td>
<td>6</td>
</tr>
<tr>
<td>Social sciences</td>
<td>3-4</td>
</tr>
<tr>
<td>Psychology</td>
<td></td>
</tr>
<tr>
<td>Developmental psychology</td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Statistics</td>
<td></td>
</tr>
<tr>
<td>Sciences</td>
<td>20</td>
</tr>
<tr>
<td>Laboratory sciences</td>
<td>8</td>
</tr>
<tr>
<td>Anatomy and physiology</td>
<td>8</td>
</tr>
<tr>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>2-3</td>
</tr>
<tr>
<td>Any extra credit from required areas, computer science or other liberal arts courses; no more than three credits in physical education or activity courses may be taken</td>
<td></td>
</tr>
</tbody>
</table>

**Total general education credits**

- 56

**Nursing courses**

(undergraduate courses taken in the R.N.-B.S. track)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 302 Dynamics of Professional Nursing</td>
<td>4</td>
</tr>
<tr>
<td>NURS 370 Nursing Theory and Research</td>
<td>3</td>
</tr>
<tr>
<td>NURS 475 Professional Issues in Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NURS 485 Managerial Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

- 13
**M.S. core curriculum component**  
(credits shared for B.S. and M.S. degrees)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 501 Advanced Professionalization I</td>
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</tr>
<tr>
<td>NURS 503 Advanced Nursing Practice: Psychosocial</td>
<td>3</td>
</tr>
<tr>
<td>NURS 504 Advanced Nursing Practice: Biological</td>
<td>3</td>
</tr>
<tr>
<td>NURS 508 Advanced Nursing Practice: Systems</td>
<td>3</td>
</tr>
<tr>
<td>NURS 511 Health Assessment for Advanced Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 512 Advanced Nursing Science</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total master’s credits applied to B.S. degree**

22*

* Not all of these courses are required in each master’s program concentration; however, a student must take at least 17 of these credits to meet the B.S. degree requirements.

The remainder of the curriculum (at least 30 credits) is consistent with all requirements of the current M.S. program and is specific to the concentration chosen.
Ph.D. in Nursing program

The goal of the doctoral program in nursing is the preparation of scholars to develop knowledge in the discipline of nursing. The program examines knowledge development in nursing through an understanding of the impact of a wide range of historical influences on the discipline and through analysis of how emerging societal issues influence knowledge development. Knowledge in the humanities and social sciences and an understanding of knowledge development in other disciplines is viewed as foundational to a full understanding of knowledge development in nursing. Methodologic competency (i.e., knowledge of research designs, methodologies and tools) is also essential to a full understanding of the scope, range and path of knowledge development and the relevance to nursing practice. Substantive areas of study are healing, risk and resiliency, biobehavioral clinical research, and immunocompetence.

Program outcomes

At the completion of the doctoral program, the student will be able to:

1. apply, transmit and generate knowledge in the discipline of nursing,
2. construct, test and modify theories for nursing in the context of social, ethical, scientific, cultural and economic influences,
3. analyze and synthesize knowledge from related disciplines for use in nursing,
4. exhibit scientific integrity in scholarly inquiry, and
5. engage in interdisciplinary collaboration in knowledge development and dissemination.

Curriculum

Core content (all students)

Philosophy and theory courses
NURS 703 Philosophy of Human Sciences
NURS 704 Theoretical Structures for Nursing Knowledge
NURS 705 Theory Construction in Nursing

Research methods and statistics
(required of all students)
NURS 770 Quantitative Research Design
NURS 772 Qualitative Research Design
NURS 773 Perspectives on Research Design
Focus of inquiry (one three-credit introductory course in focus area
required)
NURS 720 Foundations of Biobehavioral Clinical Research
NURS 740 Theoretical Perspectives in Healing
NURS 750 Risk and Resilience Across the Life Span
NURS 760 Foundations of Immunocompetence
Courses selected by student and adviser (six credits) may be taken as
NURS 791 and 792
NURS 796 Directed Research

Research program development
NURS 776, 777, 778 Research Program Development I, II, III

Advanced methods
NURS 771 Instrument Development
NURS 775 The Ethnographic Approach to Knowledge Generation in Nursing
Elective courses from other disciplines

Dissertation
NURS 898 Dissertation

Each student will be assigned an adviser with related research interests to finalize the student's plan of study. This curriculum structure requires the student and adviser to make several choices:

- the selection of a focus area,
- the choice of advanced methodological courses, or
- the selection of faculty for directed research or research practicum.

The credits indicated above are in addition to any course prerequisites.

Admission requirements

All applicants to the Ph.D. Program in Nursing must meet the following admission requirements:

1. Applicants must have both a baccalaureate and a master’s degree, one of which must be in nursing. The degree in nursing must be from an accredited school or international equivalent.

2. Applicants must have a master’s GPA of 3.0 or better on a 4.0 scale.

3. Applicants must have satisfactory scores on the General Test of the Graduate Record Exam. International applicants must have a TOEFL score of greater than 550.
4. Applicants must have a three-credit graduate-level statistics course with a passing grade of "B" or better.

5. Applicants must have licensure as a R.N. International applicants must have an equivalent credential.

All applicants must complete and submit the following materials by Dec. 1 of the year they plan to enter the program:

1. Application forms and instructions for applying to all graduate programs are available on the Graduate School Web site at http://www.vcu.edu/graduate/ps/apply_options.html.

2. Official transcripts from all previous universities and colleges attended for all graduate and undergraduate work.

3. A typed, personal statement from the applicant summarizing professional and academic experience including prior research experience, research interests, immediate and long-range professional goals, and rationale for pursuing advanced study (see guidelines for writing the personal statement for doctoral admissions).

4. A resume that includes applicant's name and address, past educational degrees, past work experiences, professional affiliations, certifications, honors and awards, presentations, and publications. Use either chronological or reverse chronological order. Use a resume-writing guide to assist in formatting the resume.

5. References from three persons who can knowledgeably comment upon applicant’s ability to succeed in an academic program (i.e., former faculty) or who can evaluate applicant’s ability to be successful in nursing research. Avoid getting references from ministers or others who are not familiar with professional and academic abilities; from friends, either professional or personal; or from personal health care providers.

6. A personal interview is required.

7. Information regarding external funding for doctoral education that may be available to applicant.

**Post B.S.-Ph.D. entry option**

All applicants to the Post B.S.-Ph.D. entry option must meet the following admission requirements:

- Applicants must have a baccalaureate degree in nursing. The degree must be from an accredited school or international equivalent.

- Applicants must have a GPA of 3.0 or better on a 4.0 scale.

- Applicants must have satisfactory scores on the General Test of the Graduate Record Exam. International applicants must have a TOEFL score of greater than 550.

- Applicants must have the R.N. licensure. International applicants must have an equivalent credential.

**Admission to candidacy**

Before admission to candidacy for the doctorate, students must have (1) satisfied the language requirement, if applicable, (2) completed all required course work, (3) successfully completed the comprehensive examination and (4) fulfilled any additional requirements.

**Comprehensive examinations**
The student will request to take the comprehensive examination at the first available testing date following completion of the doctoral course work for the Ph.D. program (approximately six weeks after the last day of class). The dates for the examination will be posted for the year and will be offered in February, June/July and September/October. The student will request the exam through completion of the Ph.D. Comprehensive Examination Request Form available from the office of the associate dean for doctoral program and research or by downloading it from the Web. The student is required to obtain a signature from the adviser who verifies that the student has completed all required courses before submitting the form to the associate dean.

A six or seven member committee of faculty appointed by the associate dean for the doctoral program and research will write and evaluate the exam questions. The committee is composed of faculty for philosophy and theory, research design and methods, and the focus areas of risk and resilience, healing, biobehavioral clinical, and immunocompetence including the faculty adviser. The examination will have four questions and will not be available to the students beforehand. The examination is an in-class examination (open book) allowing four hours per question (one question per day). All students will answer the same questions for the exam period with the exception of the specific focus question. These questions will test knowledge in:

1. philosophy and theory,
2. research designs and methods,
3. the focus area (general) and
4. the focus area (specific to the student’s area of interest).

The schedule for the questions is as follows:

Monday – philosophy and theory
Tuesday – research designs and methods
Wednesday – focus (general)
Thursday – focus (specific)

The administration of the examination is managed through the Office of the Associate Dean and a computer will be available for each student’s use in the testing site. Upon completion of each question, the answer is submitted to the associate dean’s office. At the end of the allotted time period each day, the student will submit a disk with the response to the examination question (with the social security number at the top of each page) to the office of the associate dean. No names will be included on the examination. The associate dean designee will print the copy of the answers in the student’s presence. The four-hour time allotment allows students the opportunity to proofread their response and does not require any further editing. There will be a written examination only with no oral clarification of results.

When completed, the entire examination will be forwarded to the comprehensive examination committee. The examination will be evaluated as pass/fail for each question. The student must receive a pass on all questions in order to pass the examination and must take all parts of the examination during the scheduled period. A passing evaluation by two graders constitutes a pass for each question. In the event of disagreement between the two graders, a third member of the
committee will be asked to evaluate the question. The evaluation of the examination will be completed within two weeks after the test administration. The student is notified in writing of the results of the examination by the associate dean for doctoral program and research within one month (30 days) of completion of the exam. The examination will not be returned to the student and a brief statement will be given to students who require a retake. The retake of the examination, if required, will be offered at the next examination administration with different questions. University policy allows for one retake of the examination. In the retake examination, the student will write the questions for which they did not receive an evaluation of pass in the earlier administration.

Questions about this process should be directed to the Office of the Associate Dean at (804) 828-0836 or (804) 828-8351.

Dissertation

The student must conduct a substantial independent investigation and prepare a dissertation reporting the results of this research and analyzing its significance in relation to existing scientific knowledge. Satisfactory completion of the comprehensive examination and a satisfactory oral defense of the dissertation proposal are required prior to commencement of actual work outlined in the proposal. Once approved, the dissertation proposal is similar to a formal contract between the student and dissertation committee about the nature of the dissertation. The dissertation committee must consist of a minimum of four members. Any member of the graduate faculty of the School of Nursing may chair the dissertation committee. Other committee members must include one faculty member from the student’s focus area and one member from outside the School of Nursing. An oral defense of the dissertation is conducted by the student’s dissertation committee. The student is responsible for preparing the dissertation in accordance with the most current version of the Graduate School Thesis and Dissertation Manual on the Web at http://www.vcu.edu/graduate/es/thesis.html.
School of Nursing

Post-master’s Certificate in Nursing

This program is available in seven concentration areas: adult health (acute and primary care), child health, family health, nursing administration and leadership, integrative psychiatric mental health nursing, women’s health, and nursing in faith communities. Applicants’ previous master’s course work will be evaluated individually to determine the number of credits required to meet overall program requirements.

Curriculum design

The School of Nursing recognizes that applicants to the post-master’s certificate program bring a background of a master’s or doctoral degree in nursing or are currently enrolled in a doctoral program. The curriculum for each concentration builds upon the knowledge gained in a previous master’s degree including advanced practice, research and theory, and nursing specialty content. The post-master’s certificate program allows students to enroll in an advanced practice specialty to pursue additional competencies or a certificate. The curriculum in the post-master’s certificate program meets the standards of specialty organizations and the requirements for certification as an advanced practice nurse (nurse practitioner, clinical nurse specialist or other advanced practice roles.)

When applicants are admitted, an evaluation of the transcript is conducted. Each required course in the relevant concentration is compared to the applicant’s transcript and a judgment is made whether those course objectives have been fully or partially completed in prior master’s or doctoral work. Prior courses that are accepted as evidence of full or partial completion are listed on the program plan. The curriculum plan varies according to clinical focus. This plan will be signed by the student, the student’s adviser and the associate dean for the master’s program before the student actually enrolls in the program. Thus, the program of study is agreed upon in advance. The following plans are examples of curricula:

<table>
<thead>
<tr>
<th>Adult Health: Acute Care</th>
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</tr>
<tr>
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</tr>
<tr>
<td>NURS 676 Adult Primary Practicum</td>
<td>2</td>
</tr>
<tr>
<td>NURS 678 Adult Acute Practicum (two semesters)</td>
<td>6</td>
</tr>
<tr>
<td>NURS 679 Advanced Adult Acute Practicum</td>
<td>3</td>
</tr>
<tr>
<td>NURS 682 Women’s Practicum I</td>
<td>1</td>
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</table>
Adult Health: Primary Care

- NURS 502 Advanced Nursing Practice: Pharmacotherapeutics 3
- NURS 504 Advanced Nursing Practice: Biological 3
- NURS 511 Health Assessment for Advanced Nursing Practice 3
- NURS 633 Common Health Problems of Women 1
- NURS 660 Advanced Adult Health I 3
- NURS 661 Advanced Adult Health II 4
- NURS 663 Advanced Adult Health III 3
- NURS 676 Adult Primary Practicum (two semesters) 6
- NURS 677 Advanced Adult Primary Practicum 3
- NURS 678 Adult Acute Practicum 2
- NURS 682 Women’s Practicum I 1

Child Health

- NURS 502 Advanced Nursing Practice: Pharmacotherapeutics 3
- NURS 503 Advanced Nursing Practice: Psychosocial 3
- NURS 504 Advanced Nursing Practice: Biological 3
- NURS 511 Health Assessment for Advanced Nursing Practice 3
- NURS 633 Common Health Problems of Women 1
- NURS 647 Health Promotion and Disease Prevention in Children 3
- NURS 648 Management of Acute Problems of Children and Adolescents 3
- NURS 649 Children with Special Health Care Needs 3
- NURS 672 Child Practicum I 3
- NURS 673 Child Practicum II 3
- NURS 674 Child Practicum III 4
- NURS 682 Women’s Practicum I 1
- IDDS 600C Interdisciplinary Studies in Developmental Disabilities: Teamwork in Serving Persons with Developmental Disabilities 3

Family Health

- NURS 502 Advanced Nursing Practice: Pharmacotherapeutics 3
- NURS 504 Advanced Nursing Practice: Biological 3
- NURS 511 Health Assessment for Advanced Nursing Practice 3
- NURS 633 Common Health Problems of Women 3
- NURS 634 Advanced Practice: The Childbearing Woman 2
- NURS 647 Health Promotion and Disease Prevention in Children 3
- NURS 648 Management of Acute Problems of Children and Adolescents 3
- NURS 661 Advanced Adult Health II 4
- NURS 670 Primary Care of Families 3
- NURS 672 Child Practicum I 3
- NURS 676 Adult Primary Practicum 3
- NURS 682 Women’s Practicum I 3
- NURS 684 Family Practicum 4
**Nursing Administration and Leadership**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>NURS 505 Advanced Nursing Practice: Computer and Information Technology</td>
<td>1</td>
</tr>
<tr>
<td>NURS 655 Nurse as Integrative Leader</td>
<td>2</td>
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<tr>
<td>NURS 680 Leading People</td>
<td>3</td>
</tr>
<tr>
<td>NURS 681 Nurses as Organizational Leaders</td>
<td>3</td>
</tr>
<tr>
<td>NURS 687 Management Systems and Health Care Outcomes</td>
<td>4</td>
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<tr>
<td>NURS 690 Application for Financial Concepts</td>
<td>4</td>
</tr>
<tr>
<td>NURS 692 Integrative Administrative Systems Practicum I</td>
<td>3</td>
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<tr>
<td>NURS 693 Integrative Administrative Systems Practicum II</td>
<td>3</td>
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<tr>
<td>NURS 694 Integrative Administrative Systems Practicum III</td>
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<td>Accounting elective</td>
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* Nursing administration courses are not offered every year. Students should consult their advisers for a schedule of classes.

**Nursing in Faith Communities**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>NURS 503 Advanced Nursing Practice: Psychosocial</td>
<td>3</td>
</tr>
<tr>
<td>NURS 509 Advanced Nursing Practice: Community</td>
<td>3</td>
</tr>
<tr>
<td>NURS 540 Spirituality in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>NURS 689 Integrative Systems Practicum</td>
<td>3</td>
</tr>
<tr>
<td>NURS 740 Theoretical Perspectives in Healing</td>
<td>3</td>
</tr>
<tr>
<td>Elective (theology, religious studies, pastoral care, criminal justice, comparative religion or complementary health care)</td>
<td>3</td>
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**Integrative Psychiatric Mental Health Nursing**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>NURS 503 Advanced Nursing Practice: Psychosocial</td>
<td>3</td>
</tr>
<tr>
<td>NURS 622 Integrative Psychiatric Mental Health Nursing Practicum I</td>
<td>1-3</td>
</tr>
<tr>
<td>NURS 623 Integrative Psychiatric Mental Health Nursing Practicum II</td>
<td>1-4</td>
</tr>
<tr>
<td>NURS 624 Integrative Psychiatric Mental Health Nursing Practicum III</td>
<td>1-4</td>
</tr>
<tr>
<td>NURS 654 Nurse as Integrative Healer</td>
<td>3</td>
</tr>
<tr>
<td>NURS 655 Nurse as Integrative Leader</td>
<td>2</td>
</tr>
<tr>
<td>NURS 656 Integrative Mental Health Nursing: Management and Treatment of Psychopathology for Advanced Practice Nurses</td>
<td>3</td>
</tr>
<tr>
<td>NURS 657 Integrative Mental Health Nursing: Contemporary Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 658 Complementary Healing Modalities</td>
<td>3</td>
</tr>
<tr>
<td>NURS 659 Integrative Mental Health Nursing: Synthesis</td>
<td>4</td>
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**Women’s Health**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
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**Integrative Psychiatric Mental Health Nursing**

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<tr>
<td>NURS 659 Integrative Mental Health Nursing: Synthesis</td>
<td>4</td>
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</tbody>
</table>

**Women’s Health**
Admission requirements

Requirements for admission to the post-master’s certificate program include:

- a master’s degree or doctoral degree in nursing,
- graduate degree within the last five years or two years of post-master’s clinical practice,
- foreign applicants must have a TOEFL score of greater than 550,
- current license to practice as a registered nurse in Virginia (professional liability insurance is recommended),
- three references from the applicant’s graduate program and from employers/supervisors,
- a personal interview may be requested, and
- a complete graduate application filed with the Graduate School. Admission forms and instructions for applying to all graduate programs are available on the Graduate School Web site at http://www.vcu.edu/graduate/ps/apply_options.html.

Academic requirements

- A student may not proceed in the program with a GPA of less than 3.0 or with a grade of less than “B” in any nursing course. Students earning less than “C” are referred to policy 6.4.1 in the School of Nursing Policy and Information Handbook on the Web: http://www.nursing.vcu.edu/faculty/policy.htm.

- An adviser for each student is appointed by the department chair. That adviser will assist the student in program and career planning, registration procedures, and certification for graduation.

- The departments of Adult Health Nursing, Integrative Systems and Maternal Child Health Nursing will assist respective students with advanced practice certification.

Graduation requirements

To be a candidate for the post-master’s certificate, students must be recommended by the faculty and must:

- meet academic requirements of the Graduate School,
- complete all requirements for the prescribed curriculum within five calendar years of the
first registration for work to be credited toward the certificate,

- earn at least a “B” or pass grade in all nursing courses,
- earn at least a cumulative average of 3.0 in all work presented for graduation and
- conform to School of Nursing policies in respect to pass/fail grading for course work.
School of Pharmacy

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 two 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. Since 1971, all pharmacy students have participated in a clerkship program. 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. or Pharm.D./Ph.D. program. Such students must apply to, and be accepted by, both programs separately.
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.

Mission statement

The mission of the VCU School of Pharmacy fully supports the mission and goals of the university and the Medical College of Virginia Campus. The school’s mission is to provide professional, graduate and postgraduate education, conduct pharmaceutical and biomedical research, and provide patient care and public service.

The school strives to provide an educational environment that encourages the following:

- excellence in scholarship
- excellence in teaching
- diversity and respect among students and faculty
- commitment to the various needs of students
- commitment to service within the school, university, the profession and the community
- quality direct patient care experiences within the curriculum
- commitment to fostering the concept and importance of lifelong learning

Therefore, the school shares with teaching, the interdependent and almost inseparable objectives of research, service and patient care.

Philosophy

In developing the curriculum of the School of Pharmacy, the faculty recognizes that an educated person should be prepared to assume a responsible and rewarding role in society. The new paradigm of pharmaceutical care guides the school’s curriculum committee and faculty in the design and implementation of the curriculum. Pharmaceutical care is the responsible provision of drug therapy by the pharmacist for the purpose of achieving definite outcomes that improve a patient's quality of life. In professional practice pharmaceutical care focuses on the pharmacist's attitudes, behaviors, commitment, concerns, ethics, functions, knowledge, responsibilities and skills in the provision of drug therapy, which achieve outcomes that yield improvement in a patient's quality of life. The educational program is designed to provide a sound, scientific and professional background for both those who will enter the practice of pharmacy directly and those who wish to continue graduate education in the pharmaceutical sciences. It also includes courses in the arts and humanities in order to provide the student with a broad educational base that will permit participation in community life, not only as a professional, but also as an informed, concerned citizen. The professional curriculum is rigorous and highly demanding of the student’s time; employment must not be allowed to interfere with the educational process. The
faculty has adopted a document entitled "Expected Competencies of Doctor of Pharmacy Graduates" and has expanded these competencies into knowledge, skills and attitudes that have been implemented in the curriculum.

Career opportunities

Graduation from the School of Pharmacy with a professional degree affords the opportunity to pursue one of several career paths. The most familiar role is as a provider of pharmaceutical care to ambulatory patients in a community setting. In this setting the pharmacist may be self-employed or may be an employee of an organization such as an independent pharmacy, a corporate chain of pharmacies or a managed care pharmacy in a health maintenance organization.

Many pharmacists also practice in institutional settings such as hospitals or other health care institutions.

The pharmaceutical industry also employs pharmacists in several areas including manufacturing, quality control, research, sales and as medical service representatives who call on physicians. Opportunities also are available in various government services, such as public health and veterans affairs, as well as in government-operated laboratories.

In most cases, those who aspire to engage in independent research or to teach seek graduate degrees in the pharmaceutical sciences or in specialty fields related to pharmacy.

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. Classes for students in pharmacy also are conducted in Sanger Hall, located between 11th and 12th streets on East Marshall Street. 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.
Honors and awards

**Rho Chi**

This national honorary pharmaceutical society established the Lambda Chapter at the School of Pharmacy in 1929. Charters for chapters of this organization are granted only to groups in colleges that are members in good standing of the American Association of Colleges of Pharmacy. Election to membership in the society is based on scholarship, character, personality and leadership.

**J. Doyle Smith Award**

An award presented to a graduate student for academic excellence in medicinal chemistry.

**John Wood Award**

An award presented to a graduate student for academic excellence in pharmaceutics.

**Dean’s Award for Excellence in Graduate Studies**

An award presented to a graduate student for academic excellence in pharmaceutical sciences.

Organizations

**Student chapter of the International Society for Pharmacoeconomics and Outcomes Research**

This organization fosters interest among professional and graduate students in pharmacoeconomics and health outcomes assessment.

**Professional fraternities**

Chapters of Phi Delta Chi, Kappa Psi and Kappa Epsilon are active within the student body. These fraternities extend invitations, according to the rules of the Interfraternity Council, to pharmacy students to become members. Eligibility for consideration is based upon academic achievement as determined by the Interfraternity Council and the dean’s office.
School of Pharmacy

Master of Science and Doctor of Philosophy in Pharmaceutical Sciences programs

The school offers programs of graduate study leading to the degrees of Master of Science and Doctor of Philosophy. Students may specialize in pharmacokinetics, pharmaceutics, biopharmaceutical analysis, medicinal chemistry, pharmacotherapy or pharmacy administration.

Academic regulations

Registration

While most students register for the first semester beginning in August, arrangements may be made to initiate graduate work at other times during the academic year.

Financial assistance

Graduate students in the pharmaceutical sciences may receive support via teaching assistantships, research assistantships or fellowships. The American Foundation for Pharmaceutical Education provides support to eligible applicants for graduate study in the pharmaceutical sciences. Students pursuing the master's degree will not be supported by university teaching assistantships.

The student’s adviser and the advisory committee

The departmental graduate program will advise students until a permanent adviser has been chosen. During their first semester, new graduate students are required to arrange interviews with each graduate faculty member of their major department to discuss research projects. The selection of an adviser and a research project are made in accordance with the rules and procedures of the student’s department. The adviser will arrange for the appointment of the student’s advisory committee. The responsibilities of the adviser and the advisory committee are described in the School of Medicine section of this bulletin.

Requirements for graduate degrees

Graduate students in the pharmaceutical sciences must satisfy the graduate degree requirements described in the School of Medicine section of this bulletin. In some cases, more stringent requirements are imposed. These are described in detail in departmental graduate student/rule handbooks, which are issued to all students.

All graduate students are required to attend seminars in their own discipline and are encouraged to attend seminars of interest in other departments. Students are required to present seminars
satisfactory to the faculty.

Graduate students are expected to devote maximum effort to the pursuit of their education. During normal working hours, graduate students are expected to be working on their research projects when they are not in class. Graduate students who are progressing satisfactorily may be granted permission to take outside employment during evenings or weekends.

**Graduate program admission requirements**

General requirements pertaining to the graduate program in pharmaceutical sciences follow the same guidelines for graduate studies at VCU. Additional requirements concerning undergraduate education are imposed upon applicants to graduate specialties in the School of Pharmacy.

Admission to the graduate program in pharmaceutical sciences is open to students having a Doctor of Pharmacy degree, or bachelor’s degree in pharmacy, chemistry, biochemistry, biology, premed, engineering or a related science. Acceptance is based upon undergraduate performance, satisfactory scores on the Graduate Record Examination (GRE), letters of recommendation and, where applicable, TOEFL scores. The current requirement for the GRE exam is that all applicants take the General Test containing the Mathematical Reasoning portion.

Application forms and instructions for applying to all graduate programs are available on the Graduate School Web site at [http://www.vcu.edu/graduate](http://www.vcu.edu/graduate).

**Graduate curriculum**

**Pharmaceutical sciences core**

The following courses or course areas are required of all graduate students enrolled in the pharmaceutical sciences graduate program prior to graduation. Courses and course areas that are similar to those listed and have been taken prior to entry in the program may satisfy the requirement and courses other than those listed may be substituted. The appropriate graduate program director and department chair must approve acceptance of courses and course areas that are not on the following list.

1. PCEU/MEDC 607-608 Introduction to Pharmaceutical Sciences
2. MICR 512 Laboratory Safety (pharmacy administration graduate students are not required to take this course)
3. Biological sciences (PHTX 400, BIOC/MICR 503-504, MICR 505, PMCH 620)
4. Mathematical sciences (BIOS 543, PHIS 605)
5. Ethics (MICR 510)
6. Seminar (MEDC 690, PCEU 690, PHAR 690)
7. Directed research (MEDC 697, PCEU 697, PHAR 697)

**Specialization in medicinal chemistry**

Medicinal chemistry, an amalgamation of chemistry and the life sciences, is a multidisciplinary field that applies chemical (i.e., synthetic, analytical, theoretical and/or physical chemistry)
principles to investigations of biologically active substances that include therapeutically useful drugs, natural products, toxins and drugs of abuse. Investigations may be focused on identification of biological mechanisms of action, rational drug design and synthesis, metabolism studies, identification of pharmacological tools, or the development of techniques necessary to perform such studies. The discipline requires an understanding of both the chemical and biological processes involved; thus, in addition to a solid background in chemistry, the medicinal chemist is required to be versed in biological sciences such as biochemistry, pharmacology, toxicology, molecular biology, enzyme mechanisms, receptor theory and/or neurochemistry, depending upon the student’s interests.

In addition to research, the curriculum consists of two general components: core courses and elective courses. All graduate students, doctoral and master’s students alike, are required to take core courses that include: medicinal chemistry (MEDC 591 and 601), advanced medicinal chemistry (MEDC 610 or 620), research techniques (MEDC 526), seminar (MEDC 690), biochemistry (BIOC 503 or 504), pharmacology (PHTX 691), advanced organic chemistry (CHEM 604) and molecular modeling (MEDC 641). Specific courses may be recommended on the basis of the result of placement exams administered during the first week of enrollment. Graduate students also are required to present one (master’s candidates) or two (doctoral candidates) non-thesis seminar(s) and a final seminar on their research. Depending upon their interests, and in consultation with their chosen dissertation adviser, students select from a variety of elective courses such that their graduate program can be specifically tailored to their future research or career goals. Doctoral students are required to pass a series of cumulative examinations in order to become eligible to take an oral comprehensive examination based on an original (i.e., non-thesis) research proposal. Most graduate students begin their research during their first year and are encouraged to present the results of their research in oral and poster format at various local, state and other scientific meetings. Most advanced graduate students also participate in laboratory and classroom teaching, and some as tutors, to enhance their teaching proficiency and presentation technique. Well-prepared students, depending upon the nature of their research, should be able to complete all degree requirements in less than two and a half years for a master’s degree or within about four and a half years for a doctoral degree.

Research resources include state-of-the-art molecular modeling facilities, synthetic organic chemistry laboratories, X-ray crystallographic equipment and access to high-field nuclear magnetic resonance spectrometers. The department’s research interests are closely interwoven with the VCU Institute for Structural Biology and Drug Development, which is housed on the campus and to which many departmental faculty belong.

At present, the research interests of the department include synthesis and biological evaluation of new compounds; molecular-graphics assisted drug design; determination of relationships between chemical structure and biological activity; studies of drug action; receptor binding studies; theoretical studies on structure-activity relationships of drugs, including the use of molecular orbital theory, X-ray crystallography, computational chemistry and molecular connectivity; and rational design of new drugs and studies on drug metabolism.

Specialization in pharmaceutics

Pharmaceutics can be classically defined as the profession concerned with the art and science of
formulating medicines into vehicles (tablets, suspensions, aerosols, etc.) that are optimal for the prevention and treatment of disease. This field has become multidisciplinary with increasing knowledge of the variety of factors involved. The study of the time-course disposition of drugs to a host biologic system has emerged as the discipline of pharmacokinetics and is often studied in close conjunction with the related discipline of pharmacodynamics, in which the time course of drug effects is studied.

Biopharmaceutics entails the study of the means and mechanisms by which drugs enter biological systems, while drug metabolism involves study of the rate and specificity of enzymatic chemical conversion of drugs. The sciences of pharmaceutical and biopharmaceutical analysis are concerned with the investigation of chemical and instrumental systems for qualitative and quantitative measurement of drugs. All of these related disciplines can collectively be referred to as modern pharmaceutics, which requires a knowledge and interest in mathematics, chemistry, biological sciences and physical sciences.

The curriculum includes core course requirements in statistics, biopharmaceutics, drug metabolism, pharmacokinetics, physical pharmacy, pharmaceutical analysis and seminars in drug development. Depending on the student’s interests and major adviser, prerequisites in mathematics, chemistry and pharmacology also may be required. In addition to the core course work, a variety of elective courses are available including biotechnology, advanced courses in pharmacokinetics and pharmaceutical analysis, chemical separations, physiology, spectroscopy, biochemistry, immunology and many others that may be selected in consultation with the student’s major adviser. Doctoral students take written and oral comprehensive examinations after completion of their required course work. The highlight of graduate study is conducting the research project. This project involves laboratory or clinical research, and completion is indicated by successful defense of the project.

Funding for research includes both federal and industrial sponsorship and provides a number of resources that are similar to industrial standards. A cell culture and microscopy lab, an aerosol research facility, a 72-bed clinic and a biopharmaceutical analysis laboratory are among the many resources available to students. A state-of-the-art computer laboratory is available and a temporary animal housing facility also is present in the building. Examples of research equipment available to students include: laser light scattering, laser-induced fluorescence, scintillation and gamma counters, atomic spectroscopy, chromatography, brain mapping, and differential scanning calorimetry.

Specialization in Pharmacotherapy and Pharmacy Administration

The Department of Pharmacy has two divisions: the Division of Pharmacy Administration and the Division of Pharmacotherapy. Upon admission, graduate students will generally choose an emphasis of study in one of these two divisions. The student in Pharmacy Administration usually will elect to emphasize in areas such as pharmacoeconomics, outcomes research and marketing, management, and administrative aspects of drug development. Students in pharmacotherapy usually will elect the clinical aspects of drug development or choose from several areas of pharmacotherapy, such as gerontology, mental health or infectious diseases. Graduate students also may take suitable courses outside the department in areas of basic sciences, mathematics, statistics, economics, business, health administration, computer use, pharmacology and
epidemiology. The selection and scope of the external courses will depend on student needs and research interests.

Currently, research interests of the faculty include pharmaceutical marketing, pharmacy benefits management, pharmaceutical outcomes, pharmacoeconomics, geriatric pharmacokinetics, design and management of pharmacy-related health services systems, drug prescribing, and health ethics. In addition, the following pharmacotherapy topics are included: infectious disease, mental health, cardiology, nephrology and dialysis, rheumatology, diabetes, women’s health, critical care, and geriatrics. Resources include VCU Health System, the Center for Drug Studies, the General Clinical Research Center and many health care centers in the greater Richmond area.
School of Pharmacy

Doctor of Pharmacy

The school offers the Doctor of Pharmacy degree through two program pathways. Students who do not have a Bachelor of Science in Pharmacy enroll in the first professional program that is completed in four years of full-time study at the school following completion of the two-year minimum pre-pharmacy requirements. Students holding the Bachelor of Science in Pharmacy degree who wish to upgrade their professional skills and degree enroll in a nontraditional program that can be completed through part-time study.

Accreditation

The Doctor of Pharmacy program is fully accredited by the Accreditation Council for Pharmacy Education (ACPE). The school is a member of the American Association of Colleges of Pharmacy.

ACPE has an obligation to assure itself that any institution that seeks accreditation status for its professional program conducts its affairs with honesty and frankness. Complaints from other institutions, students, faculty or the public against a school of pharmacy, including tuition and fee policies, and as related to ACPE standards, policies or procedures, shall be placed in writing in detail by the complainant and submitted to ACPE at 20 N. Clark St., Suite 2500, Chicago, IL 60602-5109.

Licensing and reciprocity

The Virginia Board of Pharmacy holds qualifying examinations for licensure on an ongoing basis throughout the year. Applicants for the examination must present evidence that their first professional degree was granted by a school of pharmacy recognized by the board. This school is among those recognized. Applicants must also present evidence of completion of 1,500 hours of practical experience. Completion of the school’s Pharm.D. program satisfies 1,200 hours of this requirement.

Those students who intend to be licensed in Virginia should contact the Virginia Board of Pharmacy, 6603 W. Broad St., 5th Floor, Richmond, VA 23230-1712.

Virginia has reciprocal licensing agreements with all states except California and Florida.

Doctor of Pharmacy program admission requirements

Applicants for admission to the School of Pharmacy must attend an accredited college for at least two academic years (six quarters or four semesters) and complete the specified course requirements prior to admission.

Students planning to seek a degree in pharmacy upon high school graduation should plan their
high school program to meet the requirements for admission in the college where they will take the prerequisite work for admission into the VCU School of Pharmacy.

The minimal admission requirements are listed. (Meeting these requirements does not, however, guarantee acceptance into the VCU School of Pharmacy.)

A. A statement affirming the applicant’s good moral character signed by one or more pharmacists, physicians or former teachers may be requested by the Admissions Committee.

B. An official transcript from the student’s primary college and all colleges attended must be supplied. Applications are considered by the Admissions Committee only after transcripts on file show completion of no less than two semesters or three quarters of college work. When offered, an acceptance is contingent upon satisfactory completion of specific work that may be in progress.

C. Applicants must present the required credits in the following subject areas for a total of at least 68 semester-hours (102 quarter-hours).

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Semester Hours</th>
<th>Quarter Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology (lecture and laboratory)</td>
<td>8.0</td>
<td>12.0</td>
</tr>
<tr>
<td>General chemistry (lecture and laboratory)</td>
<td>8.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Organic chemistry (lecture and laboratory)</td>
<td>8.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Physics (lecture and laboratory)</td>
<td>8.0</td>
<td>12.0</td>
</tr>
<tr>
<td>English</td>
<td>6.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Mathematics (at least 3 semester-hours or 4.5 quarter-hours must be calculus)</td>
<td>6.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Statistics</td>
<td>3.0</td>
<td>4.5</td>
</tr>
<tr>
<td>Public speaking</td>
<td>3.0</td>
<td>4.5</td>
</tr>
<tr>
<td>Electives</td>
<td>18.0</td>
<td>27.0</td>
</tr>
<tr>
<td>Total</td>
<td>68.0</td>
<td>102.0</td>
</tr>
</tbody>
</table>

Credits earned through Advanced Placement Tests of the College Board are not acceptable in meeting the total 68 semester-hours requirement. Such AP credits may excuse a student from taking a specific non-science course such as English, but the credits must be made up through additional electives. AP credits in science (e.g., biology, chemistry) or mathematics (e.g., calculus) must be made up with courses in kind. Generally, this requirement is achieved by taking advanced-level courses (e.g., physical chemistry as a substitute for AP credit in general chemistry).

Dual-credit courses taken during high school may be considered acceptable for transfer credit pending review of college transcripts.

All elective credits must be in liberal arts or behavioral sciences (natural sciences, physical education or studio course credits are not accepted).

Credits earned in gross human anatomy, biochemistry, microbiology or physiology are part of the curriculum of the School of Pharmacy and therefore are not acceptable in meeting the prerequisites.

In unusual cases, students may be admitted subject to completion of course credit prior to graduation.

D. Applicants must have earned a creditable average ("C" or better) overall, and in the courses specified, to meet minimum academic requirements for admission.
E. Applicants for admission must apply online through PharmCAS, a centralized application service for pharmacy schools. Paper applications will not be accepted. The PharmCAS Web site at http://www.pharmcas.org provides further details. In addition to the application submitted electronically to PharmCAS, a supplemental application will be sent directly to VCU’s School of Pharmacy. This supplemental application is available from the School of Pharmacy.

F. The dean and the committee on admissions may require a personal interview with the applicant.

G. Applicants are required to take the Pharmacy College Admission Test (PCAT) before admission.

H. Applicants whose first language is not English should submit scores from the Test of English as a Foreign Language, the Test of Spoken English or other proof that their command of English is sufficient to allow successful completion of all requirements of the program.

I. Students are admitted only at the start of the academic year. An applicant must complete one full year of the academic prerequisites before an application can be reviewed. The Admissions Committee begins reviewing applications during September of the year preceding admission. It is to the applicant’s advantage to apply during the fall of the year before expected enrollment in the School of Pharmacy. Applicants are accepted pending satisfactory completion of all prerequisite courses. Notification usually occurs in early spring.

J. Prior to enrolling, successful applicants must meet the immunization requirements set forth in the “General Information” section of this bulletin. Prior to entering the fourth professional year, students must provide proof of immunity to hepatitis B, a negative PPD test and satisfy all other university immunization requirements.

The following criteria are considered in judging applicants:

- college attended
- academic workload carried
- college overall GPA
- chemistry, biology and math proficiency
- outside activities and achievements in high school and college
- PCAT scores
- written and oral communication skills
- extent of exposure to pharmacy practice
- extent of exposure to other health disciplines
- personal interview

Time demands for this full-time program are rigorous. In general, the first three years require a Monday – Friday (8 a.m. – 6 p.m.) commitment for lectures, conferences, laboratories and off-campus visits to area pharmacy practice sites. The fourth year is devoted to experiential learning at sites located throughout Virginia. Students enrolling in the four-year professional degree program must agree to the possibility of being assigned to sites beyond the Richmond metropolitan area (e.g., eastern, northern or western Virginia). Candidates must assess personal obligations prior to seeking application.

VCU does not discriminate against qualified applicants for admission who have disabilities, and
seeks to provide reasonable accommodation to applicants and admitted students who identify themselves as having disabilities. Academic requirements essential to the program or to directly related licensing requirements will not be substituted. Upon acceptance into the program, students in need of accommodation may contact the MCV Campus coordinator for students with disabilities at (804) 828-9782 to discuss their needs.

Further information and application materials may be obtained by writing to the Chair, Admissions Committee, School of Pharmacy, Virginia Commonwealth University, P.O. Box 980581, Richmond, VA 23298-0581. Applicants also may call a toll-free telephone number, (888) 212-9287 for assistance.

**Pharm.D. program curriculum**

**First professional year**

<table>
<thead>
<tr>
<th>First semester</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 505 Anatomy</td>
<td>3.0</td>
</tr>
<tr>
<td>MEDC 501 Medicinal Chemistry I</td>
<td>2.0</td>
</tr>
<tr>
<td>BIOC 523 Biochemistry I</td>
<td>3.0</td>
</tr>
<tr>
<td>PCEU 503 Principles of Pharmacy</td>
<td>4.0</td>
</tr>
<tr>
<td>PCEU 517 Pharmacy Skills Laboratory I</td>
<td>1.0</td>
</tr>
<tr>
<td>PHAR 521 Pharmacy and the U.S. Health Care System</td>
<td>2.5</td>
</tr>
<tr>
<td>PHAR 525 Communications in Pharmacy Practice</td>
<td>2.0</td>
</tr>
<tr>
<td>PHAR 557 Pharmacy Practicum I</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second semester</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC 524 Biochemistry II</td>
<td>2.0</td>
</tr>
<tr>
<td>PHIS 506 Physiology and Pathophysiology</td>
<td>5.0</td>
</tr>
<tr>
<td>MICR 501 Microbiology</td>
<td>4.0</td>
</tr>
<tr>
<td>PCEU 506 Biopharmaceutics and Pharmacokinetics</td>
<td>4.0</td>
</tr>
<tr>
<td>PCEU 518 Pharmacy Skills Laboratory II</td>
<td>1.0</td>
</tr>
<tr>
<td>PHAR 558 Pharmacy Practicum II</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16.5</strong></td>
</tr>
</tbody>
</table>

**Second professional year**

<table>
<thead>
<tr>
<th>First semester</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHTX 603 Pharmacology I</td>
<td>3.0</td>
</tr>
<tr>
<td>MEDC 602 Principles of Pharmaceutical Analysis</td>
<td>2.0</td>
</tr>
<tr>
<td>MEDC 603 Medicinal Chemistry II</td>
<td>2.5</td>
</tr>
<tr>
<td>PCEU 617 Pharmacy Skills Laboratory III</td>
<td>1.0</td>
</tr>
<tr>
<td>PHAR 627 Principles of Pharmacy Practice Management</td>
<td>4.5</td>
</tr>
<tr>
<td>PHAR 643 Pharmacotherapy I</td>
<td>3.5</td>
</tr>
<tr>
<td>PHAR 657 Pharmacy Practicum III</td>
<td>0.5</td>
</tr>
</tbody>
</table>
Second semester
PHTX 604 Pharmacology II 4.0
MEDC 604 Medicinal Chemistry III 2.5
PCEU 606 Applied Pharmacokinetics 2.5
PHAR 644 Pharmacotherapy II 4.5
PHAR 658 Pharmacy Practicum IV 0.5
Elective(s) 2.0-3.0

Third professional year
First semester
PHAR 701 Pharmacy Ethics 2.0
PHAR 743 Pharmacotherapy III 3.0
PHAR 745 Drug Literature Evaluation 4.0
PHAR 747 Physical Assessment 1.0
PHAR 757 Pharmacy Practicum V 0.5
Elective(s) 5.0-6.0

Second semester
PHAR 718 Pharmacy Skills Laboratory IV 1.0
PHAR 724 Pharmacy Law 3.0
PHAR 744 Integrated Therapeutics 3.0
PHAR 748 Self-Medication Awareness and Community Health 3.0
PHAR 758 Pharmacy Practicum VI 0.5
Elective(s) 5.0-6.0

Fourth professional year
PHAR 760 Acute Care Pharmacy Practice 5.0
PHAR 761 Hospital Pharmacy Practice 5.0
PHAR 762 Geriatrics Pharmacy Practice 5.0
PHAR 764 Community Pharmacy Practice 5.0
PHAR 765 Clinical Elective 5.0
PHAR 766 Clinical/nonclinical Elective I 5.0
PHAR 767 Clinical/nonclinical Elective II 5.0
PHAR 768 Clinical Selective 5.0

Approximately half of the students in the fourth professional year may be obliged to travel and reside some distance from Richmond to participate in pharmacy practice clerkships. No refund of
payments for tuition, fees or other expenses may be expected by the students since credit is granted for the time spent in this phase of the program. No stipends may be earned by the students in connection with any professional practice program for which the school grants credit.

**Nontraditional Pathway Doctor of Pharmacy program**

**Admission requirements**

Applicants for this program must hold a Bachelor of Science in Pharmacy degree and a current license to practice pharmacy in the United States.

Prior to enrolling, successful applicants must meet the immunization requirements set forth in the "General Information" section of this bulletin. Prior to beginning the practice rotations students must provide proof of immunity to hepatitis B.

VCU does not discriminate against qualified applicants for admission who have disabilities, and seeks to provide reasonable accommodation to applicants and admitted students who identify themselves as having disabilities. Academic requirements essential to the program or to directly related licensing requirements will not be substituted. Upon acceptance into the program, students in need of accommodation may contact the MCV Campus coordinator for students with disabilities at (804) 828-9782 to discuss their needs.

**Program curriculum**

The recommended course work totals 48 credits: 18 credits for didactic courses and 30 credits for clinical clerkships. Waivers for up to nine didactic credits and 20 clerkship credits may be made based on the student’s professional practice portfolio or testing out of didactic courses. The prerequisite course in biostatistics may be taken from VCU faculty or credit may be granted for an equivalent course taken within the past five years. To determine course equivalency, a course syllabus and transcript of the final grade must be submitted for review.

The Professional Practice Evaluation Workshop is to explain the process for the preparation and submission of a portfolio of practice experience and what has been learned from these practice experiences. The portfolio will be used by the program committee for decisions of waiver of clinical experience credits.

Clinical experience (clerkships) may be taken full time or part time at a minimum of 10 hours per week. Clerkships may be completed in the student’s practice site if adequate access to patients is available.

**Didactic and experiential components**

<table>
<thead>
<tr>
<th>Recommended</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Practice Evaluation Workshop</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required courses – didactic</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation of Drug Literature and Information Sources</td>
<td>3</td>
</tr>
<tr>
<td>Clinical Pharmacokinetics</td>
<td>3</td>
</tr>
</tbody>
</table>
Required courses – experiential

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Experience I</td>
<td>5</td>
</tr>
<tr>
<td>Clinical Experience II</td>
<td>5</td>
</tr>
<tr>
<td>Clinical Experience III</td>
<td>5</td>
</tr>
<tr>
<td>Clinical Experience IV</td>
<td>5</td>
</tr>
<tr>
<td>Clinical Experience V</td>
<td>5</td>
</tr>
<tr>
<td>Clinical Experience VI</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

**Academic regulations**

Matriculation in the School of Pharmacy implies a willingness on the part of students to comply with university rules and regulations and to conduct themselves in a manner befitting members of the profession the students seek to enter. The program of study and regulations regarding courses of study, student conduct, etc. are subject to modification without notice. All rules and regulations set forth in this bulletin, as well as other statements issued by administrative officers of the university, apply until further notice.

**Probation**

Students may be placed on probation by either the Admissions Committee or the Academic Performance Committee. Probation is a status indicating that the student’s scholarship is deficient and is expected to be improved to a level considered to be satisfactory by the faculty. Students who fail to meet probationary stipulations may expect to have their normal progress through school interrupted. They may be required to attend summer school, to repeat a year or to withdraw. Students on probation are not eligible to be nominated for offices in the student government or to represent the school in athletics or other extracurricular activities. Students on probation are expected to stop, or drastically curtail, any outside employment. Each student who is placed on probation receives a letter in which the details of that individual’s probation are described.

**Outside work**

In general, the faculty believes that students should give first priority to their school work. Students able to maintain academic standing are not restricted with respect to outside employment. Students in academic difficulty will be advised to cease or drastically curtail any outside employment.

**Honor code**
All students are governed by the honor code and regulations of the student body organization. A detailed description of the Honor Council’s rules of procedure is available upon request.

**Faculty advising program**

Each student in the School of Pharmacy is assigned a faculty adviser who can assist with academic and personal problems. The faculty adviser also serves as the student’s mentor in the pharmacy practicum. Students usually remain with the same adviser throughout their attendance in the School of Pharmacy.

There is a faculty adviser to the Interfraternity Council as well as an adviser for each of the professional pharmacy fraternities. Each of the student chapters of professional pharmacy organizations on campus also operates with a faculty adviser.

**Attendance regulations**

The following regulations apply specifically to students enrolled in the Doctor of Pharmacy program in all of their required and elective courses offered by departments in the School of Pharmacy and to required basic science courses offered by the School of Medicine. In courses in which these regulations apply, other students enrolled with pharmacy students also are subject to the regulations.

1. The faculty considers class attendance at lectures to be an important component in the successful acquisition of knowledge and skills required of the Doctor of Pharmacy candidate. Students are strongly encouraged to attend all classes and conferences. An individual faculty member may require attendance in his or her course and establish penalties for those who are absent without an excuse from the dean’s office.

2. Attendance at laboratory and prelaboratory classes is mandatory. Students must complete all laboratory assignments before a passing grade can be assigned. An excused absence from the dean’s office is required for missing a laboratory or prelaboratory class with the ability to make up the work with credit. Students without an approved absence are still required to make up the work but will not receive credit toward their course grade.

3. Students must take tests (e.g., quizzes, laboratory practicals, examinations) and complete all other assignments at the time designated by the course coordinator. Students must recognize that faculty may give unannounced tests at any time during a course, consistent with documentation in a course syllabus. Students who miss any test in any course without an excused absence from the dean’s office will receive a grade of zero for the specific test.

4. Attendance during each assigned clerkship period is mandatory. If a student is unable to attend to required clerkship responsibilities because of illness or other exceptional circumstances, the preceptor must be notified immediately. It is the responsibility of the student to also notify the clerkship coordinator concerning a plan to make up the absent time, with the approval of the preceptor. Documentation of the absence and approval to make up the absent time will be maintained in the student’s record.

5. Absences may be excused under certain conditions. Requests for excuses for unavoidable absences must be submitted to the dean’s office, on an Absence Record form, within 24 hours of returning to the School of Pharmacy. The student must complete the Absence Record form with an explanation for the absence. Further explanation, if necessary, may be provided to the associate dean for admissions and student services. It is a violation of the honor code to make false or misleading statements on the Absence Record form. In the event of an unexcused absence, the student is responsible for all work missed.
6. A guiding principle in determining whether or not an absence will be excused is that the absence is caused by circumstances beyond the student’s control. The following are considered valid excuses for being absent from a class or clerkship.

a. Illness, a medical emergency, a dental emergency. The school normally accepts the student’s judgment that the condition was serious enough to justify the absence from class; however, the school reserves the right to require a medical opinion, particularly if the period of absence is prolonged or is repetitive. The school will require a written medical opinion when a student is absent from taking a scheduled test or final examination. If the absence is a result of a medical emergency, the student will be required to sign a written release for the school to obtain documentation from their physician describing the exact nature of the illness or emergency. This record will be submitted to the associate dean for admissions and student services as a confidential document.

b. Death of a relative or friend. Students will be excused from class to attend funerals. Absence beyond the day of the funeral will be excused for periods of mourning required by a student’s religious or cultural tradition, or when a student is too grief-stricken to return immediately to class.

c. Mandatory court appearance.

d. Mandatory religious observances. Students who anticipate absences from class because of religious obligations should submit a list of their anticipated absences at the beginning of each semester to the dean’s office. The student must also submit an absence form following each absence.

e. Failure of private, public or university transportation. Students are expected to take reasonable precautions to assure that the transportation method used is fully functional (e.g., maintaining personal automobile, avoiding the last possible return airline flight to Richmond). Proof of transportation failure will be required.

f. Attendance at professional meetings. Students in good academic standing may receive an excused absence from class to attend a meeting of a professional pharmacy organization. The student must complete an Absence Record form in advance of attending a professional meeting. A policy statement containing eligibility criteria is distributed to all students.

7. Tardiness is a form of absence that also may be excused using the criteria mentioned above. Students arriving late for a test may be given the test without an excused absence but will not be allowed extra time beyond the scheduled termination of the test. Once a student has completed the test and left the room, late-arriving students will not be permitted to take the test unless the absence is excused.

8. Absences that are not reported within 24 hours after the student returns to school will be considered unexcused. It is not the responsibility of a faculty member to determine whether an absence is excused. This determination will be made by the dean’s office.

9. Students are expected to make every effort to keep abreast of their assignments during an absence. They should also be prepared to take tests upon their return to the school or at the discretion of the faculty member after considering the student’s academic schedule. If, in the opinion of the dean’s office, the nature of a student’s absence made it impossible for that student to prepare for a test, the student will be granted an extension for taking the test.

10. A faculty member should not give a make-up test before confirming that a student’s absence has been excused. The faculty member usually provides an equivalent make-up test within a reasonable period of time. The type and format of the make-up exam will be determined by the faculty member. Within the framework of the honor code, it may be possible to administer the same examination no more than 48 to 72 hours after the originally scheduled examination. Any make-up examination should be scheduled as soon as possible to avoid impeding the student’s academic progress.
Promotion

Attending pharmacy school is not a right acquired simply by conforming with the entrance requirements and paying tuition and fees. For this reason the dean and the Academic Performance Committee require that marginal or failing performance be improved or that the student withdraw from school. "D" grades are indicative of marginal performance. Careful consideration is given during the promotions process not only to the student’s grades but also to his or her probity, industry and scholastic ability.

These guidelines delineate the course of action to be taken by the committee. Decisions regarding individual students will be made in accordance with these guidelines. Consideration will be given to pertinent information and extenuating circumstances for individual cases. The following statements present the prominent features of the promotions process.

1. Students are evaluated for progress at the end of each semester. The Academic Performance Committee assesses student progress for each of these periods. At the end of the fourth year the entire faculty will decide whether or not students have satisfied all requirements for graduation. Promotion decisions are based on achievement during the year under review and on the student’s overall progress.

2. Students who have passed the work of an academic year with grades of “C” or better in all courses will ordinarily be advanced to the next higher class.

3. The Academic Performance Committee for the year involved thoroughly reviews the academic record of each student who fails to pass a course, receives a “D” grade, does not maintain a GPA of 2.0 or better for the year or semester in question, or is on probation. Following this review, the committee may recommend promotion on a probationary basis, require a repeat of all or a part of previous work, or terminate the student’s enrollment.

4. Students who fail two or more courses during the program will be dismissed.

5. A student who earns "D" grades for six credits or more of class work in any year and/or a GPA of less than 2.0 in any year will be subject to academic probation, dismissal or may be asked to repeat the year.

6. Students will be subject to academic probation, dismissal or may be asked to repeat the year if they earn more than one “D” or “F” grade in any one of the following sequences of related courses: basic health sciences, medicinal chemistry, pharmacy and pharmaceutics, pharmacotherapeutics, and pharmacy administration.

7. Students who fail to meet conditions of probation will be required to withdraw or repeat a year’s work. Students will not be allowed to repeat more than one year of the curriculum.

8. A student must have passed all courses from the first three years of the curriculum to qualify for entry into the final year of the program.

Withdrawal

Students finding it necessary to withdraw from the School of Pharmacy must comply with the provisions for withdrawal set by the university.

The dean of the School of Pharmacy will not approve a request for withdrawal until the student has submitted a letter of resignation.

Students withdrawing without approval and failing to check out laboratory lockers will be
assessed a fee and any charges resulting from the need to replenish the contents of the lockers.

Readmission

Students seeking readmission to the School of Pharmacy will be evaluated on their total academic record. Applicants for readmission to the first professional year will not be given priority over new applicants but must compete with them on an equal basis. Readmission in advanced standing will be considered on a space-available basis.

Graduation

Students are recommended and approved for the Doctor of Pharmacy degree by the faculty of the School of Pharmacy. Candidates must meet the following requirements:

1. Be of good moral character.
2. Satisfactorily complete all the required work in a timely fashion, which will not normally exceed five years from the date of initial enrollment.
3. Pay all fees.
4. Complete the last year’s work for the degree in residence in this school.
5. Be present at the commencement-related exercises unless excused in writing and in advance by the dean.
6. Satisfactorily complete the minimum number of required clerkship rotations and demonstrate the attainment of minimum competencies.

Honors and awards

Rho Chi

This national honorary pharmaceutical society established the Lambda Chapter at the School of Pharmacy in 1929. Charters for chapters of this organization are granted only to groups in colleges that are members in good standing of the American Association of Colleges of Pharmacy. Election to membership in the society is based on scholarship, character, personality and leadership. Students become eligible for consideration during the second professional year of the pharmacy program.

Lambda Chapter annually awards certificates in recognition of outstanding scholarship to students who have completed the pre-pharmacy and first professional year pharmacy curriculum. Also, Lambda Chapter selects one member of the fourth professional year class who is recognized for excellence in scholarship, leadership, personality and character. The name is inscribed on a plaque displayed in the School of Pharmacy.

Phi Lambda Sigma

This national pharmacy leadership society established a Beta Nu Chapter at the School of Pharmacy in 2000. Charters for chapters of this organization are granted only to groups in colleges that are members in good standing of the American Association of Colleges of Pharmacy and which are accredited by the American Council of Pharmaceutical Education.
Election to membership in the society is based on the demonstration of dedicated service and leadership in the advancement of pharmacy and evidence of high moral and ethical character.

**Academic Excellence Award**

This award recognizes excellence in academics.

**APhA-ASP Professionalism Award**

This award recognizes the ideals of professionalism and excellence in patient care in all aspects of the recipient’s academic pharmacy career. The recipient must have demonstrated exceptional service and commitment to the profession through involvement in professional organizations and other extracurricular learning opportunities.

**ASHP Student Leadership Award**

This award recognizes a student with leadership experience and demonstrated interest in health-system pharmacy practice.

**Award of Excellence in Clinical Communication**

This award recognizes high academic achievement and outstanding communication skills.

**Award of Excellence in Nonprescription Medication Studies**

This award recognizes demonstrated academic achievement in the study of nonprescription drug therapy.

**Clinical Research Award**

This award recognizes a demonstrated contribution to clinical research.

**Community Practice Achievement Award**

This award recognizes a recipient’s demonstrated interest in pursuing a career in community pharmacy.

**Dean’s Award**

This award recognizes a student’s outstanding achievement and unselfish devotion to his or her class, the school, the university and the profession.

**Distinguished Service Award**

This award recognizes a student with demonstrated academic excellence, leadership and a service commitment to the university and greater community.

**Excellence in Pharmacy Award**
This award recognizes high academic achievement and professional motivation.

Health-System Practice Award

This award recognizes an individual with a demonstrated commitment to health-system pharmacy practice.

Leadership Achievement Award

This award recognizes an individual with demonstrated leadership qualities.

MCV Alumni Association Award

This award recognizes an individual with demonstrated contributions to alumni activities.

Nonprescription Drug Therapy Award

This award recognizes an individual with demonstrated motivation, knowledge and skill in the domain of nonprescription drug therapy.

Outstanding Leadership Award

This award recognizes an individual with demonstrated qualities and abilities necessary to practice community pharmacy.

Patient Care Award

This award recognizes an individual with the ability to apply clinical knowledge into practical patient care.

Pharmacy Communications Award

This award recognizes an individual with demonstrated effectiveness in pharmacist/patient communication.

Phi Lambda Sigma Student Leadership Award

This award is a peer-recognition award for a member with demonstrated contributions to Phi Lambda Sigma.

Research Excellence Award

This award recognizes excellence in research by a student completing a dual degree.

SNAPhA Leadership Award

This award is a peer recognition award for a member with demonstrated contributions to SNAPhA.
Technology Excellence Award

This award recognizes an individual with demonstrated excellence in the application of technology to enhance the profession.

VASP Chapter Award

This award is a peer-recognition award for a member with demonstrated contributions to VASP.

VPhA Research and Education Foundation Award

This award recognizes an individual in the top 25 percent of his or her class with ideals of professionalism and excellence in patient care in all aspects of their academic pharmacy career; demonstrated exceptional service and commitment to the profession through involvement in professional organizations and other extracurricular learning opportunities; and the intention to apply their knowledge to achieve better outcomes of drug therapy and health care delivery as a practitioner of pharmaceutical care upon graduation.

VSHP Excellence in Health-system Pharmacy Award

This award recognizes an individual with demonstrated excellence in health-system pharmacy practice.

Named Scholarships

Henry Addington Academy of Independent Pharmacy Scholarship

This scholarship is awarded annually to a student who has completed one full year of study in the School of Pharmacy, expresses a formal intention to practice in independent pharmacy upon graduation, has experience working in an independent community pharmacy practice, provides a letter or letters of recommendation from an independent pharmacist and has maintained a satisfactory academic record in the School of Pharmacy. A separate application must be completed, including reference letters.

Lindsay W. and Laura Butler Memorial Scholarship

This scholarship is awarded annually to a pharmacy student who has demonstrated financial need and academic achievement.

Carolyn Coleman (Stone) Scholarship

This scholarship is awarded annually to a pharmacy student who has demonstrated financial need and academic achievement.

William S. Cooper Scholarship

This scholarship is awarded annually to an African-American student who is in the upper half of their class academically and who has a demonstrated financial need.
Sheldon W. Fantle Scholarship

This scholarship is awarded annually to a pharmacy student who has demonstrated scholastic performance and leadership qualities and is from the cities of Alexandria or Fairfax or the counties of Arlington, Fairfax, Loudon or Prince William.

Russell Fiske Scholarship Fund

This scholarship is awarded annually to a pharmacy student in financial need who demonstrates service to the community and pharmacy profession and is involved in activities that benefit the school and/or university.

William W. and Patsy Gray Scholarship

This scholarship is awarded annually to a pharmacy student who has demonstrated scholastic performance and leadership qualities by involvement in professional extracurricular activities.

Linda Nixon Harvey Memorial Scholarship

This scholarship is presented annually to a rising fourth professional year student who has maintained high academic standards while exhibiting leadership, professional integrity and outstanding personal qualities.

Richard Jacobs Memorial Scholarship

This scholarship is available annually to a student who has a demonstrated financial need and academic achievement.

David D. Marshall Memorial Scholarship

This scholarship is presented annually to a married fourth professional year student who ranks academically in the top half of the class and who has demonstrated financial need and academic achievement.

Nick G. Nicholas Memorial Award

This scholarship is awarded annually to a pharmacy student who has demonstrated financial need and academic achievement.

M. Bruce Rose Scholarship

This scholarship is presented annually to a student who demonstrates scholastic ability and financial need. Preference shall be given to applicants from the Virginia Pharmacists Association Third District (i.e., Petersburg, Dinwiddie, Chester, Hopewell area).

Samuel and Gilbert Rosenthal Foundation Scholarship

This scholarship is awarded annually to a pharmacy student who has demonstrated financial need and academic achievement.
need, academic achievement and a commitment to service.

**W. Roy Smith Memorial Scholarship**

This scholarship is awarded annually to a senior pharmacy student demonstrating academic talent, strong leadership ability and involvement in community activities. A separate application must be completed, including reference letters.

**Glenn B. Updike Sr. Scholarship**

This scholarship is available to a student who demonstrates scholastic ability and has financial need. Preference shall be given to applicants who are from the Danville, Va. area.

**Warren E. Weaver Scholarship**

This scholarship is awarded annually to a student who is determined to be outstanding in character, leadership and academic performance.

**C. Eugene White Scholarship**

This scholarship is awarded annually to a senior pharmacy student in financial need who demonstrates service to the community and pharmacy profession and is involved in activities that benefit the school and/or university.

**Edward E. Willey Pharmacy Scholarship Award for Outstanding Scholarship and Leadership**

This scholarship is presented annually to a rising fourth professional year student who is determined to be outstanding in character, as judged by faculty and classmates; leadership ability, as demonstrated by participation in and leadership of student organizations; and academic performance, as demonstrated by the attainment of a 3.75 grade-point average during the first three years in pharmacy school. A separate application must be completed, including reference letters.

**Organizations**

**Virginia Academy of Students of Pharmacy**

Students in the School of Pharmacy have an opportunity to become members of this organization that is affiliated with the Virginia Pharmacists Association and the American Pharmaceutical Association. The group meets regularly presenting programs of interest to the student body.

**Student Chapter Virginia Society of Health-System Pharmacists**

Pharmacy students who are interested in the practice of pharmacy in organized health care settings may become members.

**Student National Pharmaceutical Association**
This student subdivision of the National Pharmaceutical Association works to define the future role of minority health professionals in the community.

**Student Association of Community Pharmacists**

This student organization focuses on issues of interest to students who plan to pursue careers in community pharmacy. It is affiliated with the National Community Pharmacists Association.

**Student Chapter of the Academy of Managed Care Pharmacists**

This student organization serves the interests of students who plan to pursue a career in the managed care practice environment.

**Student Chapter of the International Society for Pharmacoeconomics and Outcomes Research**

This organization fosters interest among professional and graduate students in pharmacoeconomics and health outcomes assessment.

**Professional fraternities**

Chapters of Phi Delta Chi, Kappa Psi, and Kappa Epsilon are active within the student body. These fraternities extend invitations, according to the rules of the Interfraternity Council, to pharmacy students to become members. Eligibility for consideration is based upon academic achievement as determined by the Interfraternity Council and the dean’s office.

**Financial aid**

See the Professional Studies at VCU section of this bulletin.

**Courses of instruction**

Enrollment in courses included in the Doctor of Pharmacy curricula summarized on the preceding pages requires the approval of the dean of the School of Pharmacy unless the student has been admitted to the Doctor of Pharmacy Program.
Combined Pharm.D./M.S. and Pharm.D./Ph.D. programs

In their first two years (P-1 and P-2), the Pharm.D./M.S. or Pharm.D./Ph.D. students will complete the required Pharm.D. curriculum while attending research seminars, and possibly pursue graduate courses as electives. After admission into the graduate program, the students will take required graduate courses in lieu of Pharm.D. courses during their P-3 (G-1) year followed by graduate research during the summer. During their G-2 through G-4 years, the students will complete the graduate course requirements and their required Pharm.D. clerkships and work on their graduate research project. Stipends and tuition may be provided for students serving as graduate teaching or research assistants. During that period, the student will follow procedures prescribed to Ph.D. students in Pharmaceutical Sciences.

Students can focus on the following research areas within the School of Pharmacy: pharmacotherapy, pharmacokinetics, biopharmaceutical analysis, pharmaceutics/physical pharmacy, pharmacy administration and medicinal chemistry. Also, students may focus on the following research areas within the School of Medicine: pharmacology and toxicology. The choice of research area determines the required graduate course work.

The combined Pharm.D./M.S. and Pharm.D./Ph.D. programs in the School of Pharmacy are full-time programs of professional education while offering an opportunity for advanced study in pharmaceutical sciences. The programs recognize the need for pharmacy practitioners with excellent research skills in clinical, academic, industrial and regulatory environments. The programs are designed to take advantage of efficiencies in both the Pharm.D. and the M.S. or Ph.D. programs, and allow students in the combined program to complete the program requirements of both programs after five or six years with both degrees being awarded at the same graduation ceremony.

Students may be admitted into the programs before or during their first two years of enrollment in the Pharm.D. program. Applicants must demonstrate a good academic record, experience in research (e.g., during summer research fellowships with the school’s graduate faculty) and successful completion of the Graduate Record Examination (GRE). Additionally their application must be sponsored by a graduate faculty member.
The Pharm.D./M.B.A. program seeks to prepare pharmacists for careers that encompass pharmacy and business theories and principles. The program is designed to take advantage of efficiencies and electives in both the Pharm.D. and M.B.A. programs. Students in the combined program can earn both degrees and save as much as one year or more over the time required for enrolling in the programs separately.

Students may be admitted in the program during their first year of enrollment in the Pharm.D. program. Applicants must be an enrolled student in the Pharm.D. program, have demonstrated a good academic record and have successfully completed the Graduate Management Admission Test (GMAT).

To get both degrees, students will take all pharmacy courses unless waived, the seven business foundation courses, the nine M.B.A. core courses and three elective courses. The elective M.B.A. courses may be taken from pharmacy administration courses at the 600 level, and a combination of a business seminar course and an elective advanced pharmacy practice experience in pharmacy management. The business foundation courses can be taken during the first two years in the pharmacy program with summer session(s). The M.B.A. core courses can be taken during the third and fourth years in the pharmacy program. The business electives can be taken during the fourth and fifth years in the combined program.

Curriculum requirements

To earn both degrees, students will complete the following requirements. For the Pharm.D. program, all required Pharm.D. prerequisite and required courses must be taken unless waived by the appropriate representative of the School of Pharmacy. For the M.B.A. program requirements, the foundation courses listed below must be taken. Courses may be waived for students who have taken the equivalent material at the undergraduate level.

ACCT 507 Fundamentals of Accounting
ECON 500 Concepts in Economics
FIRE 520 Financial Concepts of Management
MGMT 524 Statistical Elements of Quantitative Management
MGMT 540 Management Theory and Practice
MRBL 530 Fundamentals of the Legal Environment of Business
MRBL 570 Concepts and Issues in Marketing

The following nine courses of the M.B.A. Advanced Program will be required for each student:
Lockstep Semester I: (to be taken at same time)
INFO 661 Information Systems for Managers  
MGMT 641 Organization Leadership and Project Team Management

Lockstep Semester II: (to be taken at same time)
INFO 664 Emerging Issues in Information Technology  
MGMT 675 Operations Management

Remaining Advanced Program Courses:
ACCT 608 Managerial Accounting  
ECON 610 Managerial Economics  
FIRE 621 Cases in Financial Management  
MGMT 642 Business Policy  
MRBL 671 Marketing Management

Three M.B.A. elective courses may be taken in the School of Business or by completing approved Pharm.D. electives and/or an applied pharmacy practice experience in pharmacy management, as individually approved by the director of graduate programs in the School of Business.

The key to successful completion of the Pharm.D./M.B.A. dual degree program will be timely and continuing advising from both the appropriate School of Pharmacy adviser and the director of graduate programs in the School of Business. For this reason, students are encouraged to seek admission to the dual degree program as early in their Pharm.D. program as possible.

Admission requirements

Students interested in pursuing the Pharm.D./M.B.A. dual degree program must first obtain admission to the Pharm.D. program. Admitted Pharm.D. students who desire to add the M.B.A. degree to their program must apply to the M.B.A. program using the Application for Graduate Study found at the Graduate School Web site: http://www.vcu.edu/graduate.

A complete application to the M.B.A. program includes:

- Application for Graduate Study and application fee.
- Request for In-state Tuition Rates (as applicable).
- Three letters of reference, including a letter of support from the School of Pharmacy.
- Official transcripts from all universities previously attended, including current VCU transcript.
- Current GMAT test score.
- Interview with director of graduate programs in School of Business.

Tuition and financial aid considerations

Upon admission to the M.B.A. program, a Pharm.D. student will be considered a dual degree-seeking student. Students will most often register for a mix of School of Business courses and School of Pharmacy courses each semester of the program. The School of Pharmacy and School of Business have agreed that dual degree-seeking students will be considered Pharm.D. students...
in years P1, P2, P3 and P5. Students will be considered M.B.A. (graduate) students in year P4.
When categorized as Pharm.D., a student will be charged tuition and fees from the School of
Pharmacy and will be eligible to receive financial aid awards as a Pharm.D. student. When
categorized M.B.A. (graduate) a student will be charged the graduate tuition and fee rate of the
Monroe Park Campus and will be eligible to receive financial aid awards as a graduate student.
School of Pharmacy

Department of Medicinal Chemistry

The Department of Medicinal Chemistry applies the latest strategies and concepts from several broad scientific disciplines including synthetic chemistry, molecular modeling, computational biology, structural genomics, and pharmacology.

William H. Soine
Professor and Interim Department Chair

Master of Science and Doctor of Philosophy in Pharmaceutical Sciences

Pharm.D./Ph.D. program
Department of Pharmaceutics

The Department of Pharmaceutics offers graduate study leading to the degrees of Master of Science and Doctor of Philosophy in Pharmaceutical Sciences. In addition, students may elect to pursue a joint Pharm.D./Ph.D. program. These programs provide the preparation and research experience for academic, federal and industrial careers.
School of Pharmacy

Department of Pharmacy

The Department of Pharmacy is the largest of the three departments at the VCU School of Pharmacy. The focus of the Department of Pharmacy is pharmacotherapy (the safe and effective use of drugs in humans), and pharmacy administration (evaluation of the social and economic impact of drug therapy in humans and in health care systems).

Ronald E. Polk
Professor and Department Chair

Master of Science and Doctor of Philosophy in Pharmaceutical Sciences

Pharm.D./Ph.D. program
The School of Social Work was established in 1917 as the Richmond School of Social Economy. Later, renamed the School of Social Work and Public Health, it became the first unit of Richmond Professional Institute. The school developed initially in response to community needs to help World War I veterans with their social and health problems. Subsequent development of the school has expanded activity into all areas of human service. The School of Social Work is one of the oldest of its kind in the South. With the creation of Virginia Commonwealth University in 1968, the School of Social Work became a unit of the university’s Monroe Park Campus. The Raleigh Building at 1001 W. Franklin St. houses faculty offices, a student lounge, a classroom and conference rooms.

Richmond provides a unique setting for social work education. The population of the metropolitan area is approximately 800,000 persons. As a community, Richmond is in a period of exciting economic and social growth, permitting varied opportunities for community study and field instruction. As the capital of Virginia, Richmond offers educational opportunities in many state government agencies concerned with the development and provision of social services. In addition to its Richmond campus, the VCU School of Social Work offers an off-campus program in Northern Virginia. Located in Alexandria, its proximity to Washington, D.C. allows additional opportunities with federal agencies and national organizations. In both locations the school’s access to a large number of social agencies permits students to participate in the delivery and development of a wide range of social services.

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 social work 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 in 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.

The origins of the social work profession were in the settlement house and charity organization societies’ movements of the late-19th century. 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 the 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.

Educational programs

The School of Social Work offers three degree programs. These are an undergraduate curriculum leading to the Bachelor of Social Work degree, a graduate professional curriculum leading to the Master of Social Work degree, and a doctoral program in social work.

Baccalaureate social work program

The four-year program leading to the Bachelor of Social Work degree is accredited by the Commission on Accreditation of the Council on Social Work Education. The objectives of the baccalaureate program are to prepare students for beginning-level professional social work practice and, in the case of students wishing to pursue additional social work education, for graduate study.

A description of the baccalaureate program may be found in the VCU Undergraduate Bulletin.

Financial assistance for M.S.W. and Ph.D. students

Although financial assistance is limited, some funds are available. No prospective student should refrain from seeking admission to the school for financial reasons alone.

Federally guaranteed loans and work-study program
See Student Financial Assistance in the Graduate Studies at VCU section of this bulletin.

**Assistantships for doctoral students**

Research and other assistantships and fellowships are usually available to doctoral students. Additional information is available from the director of the Ph.D. program.

**School-based awards/endowed scholarships**

School of Social Work awards are available to continuing students in the form of school-based tuition assistance and endowed scholarships. Tuition assistance awards are generally made in the summer to be applied during the fall and spring semesters. Scholarship resources and award amounts are very limited. Scholarships are awarded on the basis of the candidate's academic performance, financial status, and/or qualifications for professional study in a particular practice area. Special M.S.W. scholarships and stipends are available for minority students and students seeking to specialize in the areas of health, mental health and child welfare. Since funds available through the School of Social Work are limited, applicants are strongly urged to seek additional sources to finance their education. A complete listing of tuition assistance and scholarships is available on the school's Web page: http://www.vcu.edu/slwweb/currentstudents/financial_support.html.

**Traineeships**

States may have programs to assist individuals in securing professional education through their departments of social services, mental health, corrections and rehabilitation. These may be consulted locally. The school at times administers and awards federal and university traineeships for qualified M.S.W. students.

**H. H. Hibbs Loan Fund**

The H. H. Hibbs Loan Fund was established by the School of Social Work Alumni Association for short-term emergency needs. Enrolled students who wish to apply for a loan should discuss this with their faculty adviser and the associate dean.

**Continuing education**

Post-degree study is a vital part of professional work education. The School of Social Work offers a variety of lectures, institutes and workshops as part of the school’s commitment to enhance social work practice and broaden educational experiences for students, social workers, field instructors and others in social service delivery systems.

State, regional and local agencies and institutions frequently identify educational and training needs in content or skill areas for selected staff members. The school, through contractual arrangements, contributes expertise in designing and implementing short-term training courses and materials.

Offerings are planned throughout the year. For further information about specific continuing education courses, inquiry should be addressed to the Director of Continuing Education, School
The School of Social Work Alumni Association actively supports the school, its students and faculty. The association sponsors different activities during the year, including a job-seeking skills workshop, a reception for graduating students and their families, and a welcome reception for new students at orientation. The association also cosponsors several workshops annually, offering continuing education opportunities for alumni, which are often open to students as well. All graduates of the School of Social Work are members of the alumni association. The association falls under the umbrella of the VCU Alumni Association.

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.

Black Student Association

The Black Student Association 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. Black students are expected to maintain membership in and are members of the M.S.W. Student Association of the school.

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.

Other student interest groups

The School of Social Work supports the development of groups that address a variety of student needs and interests.

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.
Master of Social Work

The school offers a graduate professional curriculum accredited by the Commission on Accreditation of the Council on Social Work Education leading to the Master of Social Work degree. The M.S.W. is offered on the Monroe Park Campus in Richmond and at an off-campus site in Northern Virginia.

The purpose of the M.S.W. program at VCU is to educate persons for advanced practice in either clinical social work or social work administration, planning and policy practice. The guiding principle in educating students is the promotion of a more just society that includes a commitment to the value of diversity and social work practice in a multicultural society. The VCU School of Social Work emphasizes critical thinking, self-awareness, data-based decision making and ethical integrity.

Graduates of this program will be able to address personal and social problems; formulate, implement and evaluate policies and programs; engage in knowledge development for the profession; and influence community decision making. The educational program focuses on service to and empowerment of people who experience oppression or vulnerability due to inadequate or inequitable distribution of personal, social or institutional resources.

Within this context, social work practice is defined as the application of professional knowledge, skills and values across a range of settings and populations for the prevention and amelioration of personal and social problems. The interactions among persons and their environments are the primary targets of social work practice. Services provided by social workers include the restoration, rehabilitation, maintenance and enhancement of optimal functioning of individuals, families, groups, communities and organizations.

Knowledge for social work practice is based on analysis and critical application of qualitative and quantitative research from within the profession and related social, behavioral and biological sciences. Skill in professional practice is based on the differential application of theories and research findings about people in their sociocultural and organizational contexts. Skill is developed by the social worker through the educational process, self-critical practice and the use of supervision and consultation. Values in social work practice are articulated in the profession’s code of ethics and reflect the core values of service, social justice, dignity and worth of each individual, importance of human relationships, integrity, and competence.

Admission to the master’s degree program

Full-time or structured part-time program applicants are admitted to begin study in the fall.
semester only. Advanced standing program applicants are admitted for the summer session only. At the time of application, applicants may apply for only one of the following: full time on-campus Richmond, full time off-campus Northern Virginia, part time on-campus Richmond, part time off-campus Northern Virginia, or advanced standing. Application deadlines are Feb. 1 for full-time or part-time programs and Dec. 1 for the Advanced Standing Program. Application forms and instructions for applying to all graduate programs are available on the Graduate School Website at http://www.vcu.edu/graduate/ps/apply_options.html.

General admission requirements

Within the policies established by the University Graduate Council, the School of Social Work has established the following minimum criteria for admission to the 60-credit full-time or part-time program:

- a bachelor’s degree from an accredited college or university,
- a cumulative GPA of 2.7 on a 4.0 scale for all undergraduate course work and a 3.0 (“B”) for the last 60 credits,
- a broad liberal arts background. Applicants must have completed a minimum of 30 semester credits in the liberal arts. Applicants must have completed at least one course (unless otherwise specified) in each of the following four areas:
  - Mathematics/computer sciences: math, logic, statistics, computer sciences
  - Humanities: English composition, literature, art history, music appreciation, philosophy, languages, religious studies, multicultural studies
  - Social and behavioral sciences: psychology, sociology, anthropology, history, political science, economics (with at least three credits in psychology and three credits in sociology)
  - Biology and physical sciences: anatomy/physiology, botany, general biology, zoology, chemistry, ecology, physics, geology, astronomy (with a minimum of three credits in human biology content).

Applicants who have not completed all the liberal arts prerequisites may be considered for admission but must have completed the prerequisite courses prior to enrollment and must provide official transcripts to document their completion. Courses may be completed at a community college or four-year institution. In addition to the academic requirements, the applicant must demonstrate commitment to social welfare and social justice. This should be reflected in (1) the personal statement and (2) the applicant’s academic background, social work employment, internships and volunteer work in community agencies serving vulnerable and/or oppressed populations.

General admission procedures

Applications will be reviewed when they are complete. This includes the application form, three letters of reference (such as from faculty, employers, colleagues who know the applicant’s academic and work/volunteer abilities), official transcripts from all undergraduate and graduate colleges and universities attended, a personal statement, the supplemental Academic Information form and an employment resume. The applicant is responsible for ensuring that all materials are submitted prior to the application deadline. Applicants are encouraged to submit
their materials well before the deadline.

Some early decisions will be made on very strong applications; the majority of decisions will be made after the application deadline when the entire applicant pool can be considered. The admission review process includes faculty, practitioner, and administrative review of the applications. Reviewers consider scholarship ability, academic background, writing skills, work and volunteer experience, and personal qualities that indicate potential to meet the requirements of the social work profession. The school is particularly committed to ensuring a student population that reflects the multicultural and diverse nature of American society.

**Advanced Standing Program**

The Advanced Standing Program leads to a Master of Social Work degree upon completion of 39 credit hours. The program begins in early June, continues through the summer, and culminates with graduation the following May. The Advanced Standing Program is a full-time program only and cannot be pursued on a part-time basis.

Admission to the Advanced Standing Program is available to a select group of students with a bachelor’s degree from an undergraduate social work program (B.S.W.), accredited by the Commission on Accreditation of the Council on Social Work Education, completed no more than five years prior to the date of application to the M.S.W. Program.

The minimum requirement for admission to the Advanced Standing Program is a 3.2 GPA on a 4.0 scale for the last 60 semester hours of academic work and a 3.0 cumulative GPA. Exceptions may be made to the GPA requirements for applicants with exceptional circumstances.

As part of the application packet, applicants must submit their field practicum evaluation(s) and a reference letter from the field practicum faculty. Applicants who meet these criteria will be scheduled for a structured on-campus interview, which includes a written case assessment.

Admission decisions will be based on application materials and faculty/administrative evaluation of applicant performance on the structured interview and written case assessment.

**Transfer admits**

Applicants transferring from other CSWE-accredited M.S.W. programs must submit course syllabi, field practicum evaluations and a Statement of Good Standing from the dean or director of the program from which the student is transferring. These materials must be submitted in addition to the required application form, transcripts, personal statement, resume and reference letters. No more than 30 semester credits will be accepted in transfer, and transfer credit will be awarded in accordance with university policies governing transfer credit and time limits for degree completion.

Applicants from non-social work graduate programs must submit course syllabi for transfer evaluation. A maximum of six semester credits of elective course work may be accepted in transfer from non-social work graduate programs in accordance with university policies governing transfer credit and time limits for degree completion. No course credit is given for life or work experience.
Course waiver information for new M.S.W. students

Students may request to be waived from courses in the M.S.W. program if they can demonstrate they have satisfactorily completed the equivalent courses. Students must present evidence of content equivalency to the M.S.W. program director and have earned an "A" or "B" grade in the courses that are the basis for the waiver request; these courses must have been completed within the last five years. A portfolio process is used to assess equivalency.

Graduate students from non-M.S.W. programs, from B.S.W. programs but not in the Advanced Standing Program, and from B.A., B.S. or other undergraduate programs may be waived from no more than three foundation courses:

SLWK 609 Foundations of Research in Social Work Practice
SLWK 601 and 610 Human Behavior in the Social Environment I and II

The course waiver does not result in award of credit. Credit may be awarded only through transfer of graduate courses (see Transfer Policy). Students who are granted waivers but not transfer credits must take elective courses to fulfill the number of credits that have been waived.

Students interested in pursuing a waiver for one or more of the specified foundation courses should contact the M.S.W. Program Office to request the Equivalency Portfolio Form(s) and instructions. Additional information concerning course waivers is available online: http://www.vcu.edu/slwweb/admissions/msw.html.

Special admits

Special admission may be granted to applicants whose GPA does not meet the minimum requirements, but who have strong practice-related experience and other exceptional qualifications. Although the GRE is not required, applicants may submit GRE scores or transcripts reflecting graduate course work completed to provide information on their capability for graduate study. Applicants admitted as provisional students (with GPAs below 2.7) must complete the first 12 credits in the program with a GPA of 3.0 or better and meet with their adviser at least three times during their first semester in the program.

Master of Social Work degree requirements

The regular standing M.S.W. degree requires the completion of 60 credits of graduate study (two years of full-time study). The first 30 credits may be taken in one academic year on a full-time basis or may be extended to a maximum of two years in the structured part-time program in Richmond and Northern Virginia. Students select an area of concentration for the last 30 credits, which can be completed in one academic year on a full-time basis or extended to a maximum of two years in the structured part-time program. Students are usually in a field instruction practicum two days each week during the foundation curriculum and three days each week during the concentration curriculum. Students must complete all required course work for the M.S.W. degree; however, modifications to the structure of the curriculum can be made for students with special learning needs.
Course credit for work or life experience is not granted in lieu of M.S.W. course credits.

M.S.W. curriculum

The purpose of the Master of Social Work Program is to prepare graduate-level social workers with mastery of the knowledge, values and skills essential for advanced social work practice in a multicultural society. The school accomplishes this purpose through its full- and part-time programs of study for the M.S.W. degree in its on- and off-campus locations. The objectives of the M.S.W. Program are to:

● provide a foundation curriculum of the knowledge, skills, ethics and values essential for work with individuals, families, groups, communities and organizations,

● provide a concentration curriculum preparing students for advanced practice in either clinical social work practice or social work administration, planning and policy practice in a range of settings,

● promote students’ adherence to and application of the profession’s values and ethical principles,

● promote students’ understanding of the implications of diversity by educating them to identify cultural strengths and counteract individual and institutional prejudice, oppression and discrimination,

● enable students to use research methods to analyze and critically evaluate professional practice, programs and service delivery systems,

● promote students’ understanding of advocacy and involvement in advocacy to effect social and economic justice, and

● provide a learning environment that instills in students a commitment to continued learning and self-critical practice.

The foundation

The foundation curriculum comprises the first 30 credits of the M.S.W. program. The purpose of the foundation practice, in laying the groundwork for concentration study, is to develop the knowledge and skill base necessary to apply and carry out core competencies (relationship building, problem identification, assessment, selecting and planning interventions, implementation, and evaluation) with individuals, families, groups, communities and organizations. Foundation practice emphasizes critical thinking, client strengths, commitment to social work values and ethical principles, self-awareness, professional development, evidence-based decision making, multicultural competency, and social and economic justice. The foundation curriculum includes courses in social work practice, human behavior, social policy, social justice, research and field instruction.

Concentration options

After completion of the foundation year of study, M.S.W. students choose an advanced concentration in either clinical social work practice or social work administration, planning and policy practice. The concentration curriculum prepares graduates for active roles in practice and program evaluation and in the generation of knowledge for future practice, programs and policy.

Both concentration options are available in Richmond and at the Northern Virginia off-campus location.
Clinical social work practice involves a mutual problem-solving process in which multidimensional assessment, goal setting, planned intervention and evaluation are prominent components, all of which are informed by current scientific knowledge. All clinical practice is grounded in the values and purposes of the social work profession. The goal of clinical social work is to promote effective coping with life challenges and transitions. This is achieved by helping people solve problems, change dysfunctional behavior, resolve emotional and interpersonal conflicts, develop and use social networks and resources and maintain achieved capacities and strengths. This goal rests on the fundamental belief in the dignity of all human beings and in communal responsibility for all members of the multicultural society.

Clinical social work practice takes place in the context of a purposeful relationship. The conscious use of the professional self is central in building and maintaining such relationships. Interventions may involve therapeutic, supportive, educational and resource management activities. These interventions are based on a process of strengthening and reordering of organizational structures in the lives of clients: intrapersonal (including intrapsychic), interpersonal, institutional and/or social.

SWAPP concentration

The Social Work Administration, Planning and Policy Practice concentration prepares graduates to become leaders skilled in analyzing, formulating, implementing and evaluating policies, plans and programs. The knowledge, values and skills that are taught emphasize current theory and research through classroom and field-based experiences. Practice takes place in the context of a complex, changing environment in which communities and governmental, legislative, nonprofit and for-profit organizations advocate for, plan, and deliver social services and advocate for social change. The major themes within the integrated curriculum are social and economic justice, diversity, leadership, and advocacy.

Field instruction

Field instruction courses are an integral part of the curriculum of the School of Social Work. Academic credit is awarded for field instruction hours completed in a community agency under professional supervision. In the first field placement, students are expected to demonstrate in practice the professional knowledge, values and skills studied in the total foundation curriculum.

In the concentration component of the curriculum, students are placed in agencies according to their chosen concentration (clinical social work practice or social work planning and administrative practice) and their career interests. Examples of such agencies are: public social services, community mental health centers, hospitals, substance abuse treatment programs, schools, family and children’s services, and correctional facilities.

Part-time students planning to take either foundation or concentration field instruction (two semester or block option) must request placement in writing one full semester prior to the semester or summer in which they plan to begin field instruction. Such requests are to be
addressed to the director of field instruction. Only one placement (foundation or concentration) may be taken in a block and the block placement option is typically only for students in the structured part-time program. Exceptions are sometimes granted for students with special learning needs.

Field instruction placements are generally available throughout Virginia, Washington, D.C. and in some neighboring states. Students residing in a community outside of Richmond may request field placement in their home community. Granting of the request depends on availability of appropriate resources. Students are, however, placed in agencies for field instruction primarily on the basis of curriculum requirements. Therefore, a number of students usually are placed in agencies a distance from Richmond (or their residence). Access to a car is essential and arrangements for travel must be made by students at their own expense.

Students may propose to complete one of their two field placements in their social work agency of employment. The proposal form may be obtained from the Field Department Office and the plan must meet the school’s educational requirements. This option is not available to Advanced Standing Program students who complete only one field placement during their three semesters in the program.

Credit for work or life experience is not granted in lieu of field instruction course credits.

Structured part-time study for the Master of Social Work degree

The school offers a structured part-time program leading to the M.S.W. degree on the Richmond campus and at its off-campus site in Northern Virginia. Students applying for the structured part-time program must: meet the same criteria for admission as full-time students; be admitted to the university prior to enrolling in any courses in the structured part-time program; and begin the program in the fall semester only. Students in the structured part-time program also must complete six credits each fall and spring semester and are expected to complete all requirements for the degree within a four-year period, making full-time work very difficult. The structured part-time program cannot be completed entirely in night or weekend study, given field practicum requirements and the scheduling of some courses. With the exception of the field practicum, foundation courses required in the structured part-time program are available in the evening (4 and 7 p.m. classes). Students may take the concentration curriculum (last 30 credits) on a structured part-time or full-time basis at the Northern Virginia off-campus site or on campus in Richmond.

Curriculum exceptions

Students must complete all required course work for the M.S.W. degree; however, modifications to the structure of the curriculum may be requested by students with special learning needs. VCU has an Office of Services for Students with Disabilities. They work with students to determine academic adjustments that may be needed. They can be reached by calling (804) 828-2253 (VTDD). Students with disabilities also may call the director of student services in the School of Social Work, (804) 828-0703, to discuss their particular learning needs. The director of student services in the School of Social Work works with these students to determine potential curriculum options. There also is a Students with Disabilities organization in the School of Social
Work that provides support and engages in advocacy activities on behalf of students with disabilities.

## Academic status

A minimum GPA of 3.0 ("B") on a 4.0 scale over the entire period of study, a minimum of 60 credits in the two-year and part-time options, or 39 credits in the Advanced Standing Program, demonstrated ability in social work practice and acceptable professional behavior are required for graduation with a Master of Social Work degree.

Students must achieve a GPA of 3.0 or higher in the required foundation courses, exclusive of field instruction practicum, in order to continue into concentration study.

A student whose cumulative GPA is less than 3.0 at any point in the program or after completion of the first 12 credits will be dropped from the program.

A student who receives any grade of "D" or "F" will be dropped automatically from the program without regard to GPA.

A student who earns a grade of "C" or below in more than six credits, exclusive of field instruction, will be dropped automatically and immediately from the program without regard to GPA.

Field practicum performance is graded on a pass/fail basis. The student must receive a grade of pass to continue in the program. The student who receives a grade of fail in the field practicum is dropped automatically and immediately from the program without regard to GPA.

A student who is dropped from the Master of Social Work program may petition the dean of the School of Social Work in writing for readmission to the program after a minimum absence of two semesters; readmission is not guaranteed. A student may be readmitted only once.

### M.S.W course requirements

All students complete the same course requirements for the foundation curriculum prior to entering concentration courses. Concentration study varies according to the student’s choice of method.

#### Two-year program

**Foundation**

<table>
<thead>
<tr>
<th>First year, fall semester</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWK 601 Human Behavior in the Social Environment I</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 602 Policy, Community and Organizational Practice I</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 603 Social Work and Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 604 Social Work Practice with Individuals, Families and Groups I</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 693 Foundation Field Instruction I</td>
<td>3</td>
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</table>
## First year, spring semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWK 605</td>
<td>Social Work Practice with Individuals, Families and Groups II</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 606</td>
<td>Policy, Community and Organizational Practice II</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 609</td>
<td>Foundations of Research in Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 610</td>
<td>Human Behavior in the Social Environment II</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 694</td>
<td>Foundation Field Instruction II</td>
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**Total:** 15

## Clinical concentration

### Second year, fall semester

<table>
<thead>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWK 703</td>
<td>Mental, Emotional and Behavioral Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 704</td>
<td>Clinical Social Work Practice I</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 706</td>
<td>Research for Clinical Social Work Practice I</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 793</td>
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<td>Elective</td>
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**Total:** 15

### Second year, spring semester

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>SLWK 705</td>
<td>Clinical Social Work Practice II</td>
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</tr>
<tr>
<td>SLWK 707</td>
<td>Research for Clinical Social Work Practice II</td>
<td>3</td>
</tr>
<tr>
<td>SLWK 710</td>
<td>Concentration Social Policy</td>
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<tr>
<td>SLWK 794</td>
<td>Concentration Field Instruction</td>
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**Total:** 15

## Administration, planning and policy practice concentration

### Second year, fall semester

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<tr>
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<td>Strategies for Social Work Planning and Administrative Practice</td>
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</tr>
<tr>
<td>SLWK 712</td>
<td>Social Work Planning and Administrative Practice I</td>
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</tr>
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<td>SLWK 714</td>
<td>Research for Social Work Administration, Planning and Policy Practice I</td>
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<tr>
<td>SLWK 793</td>
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**Total:** 15

### Second year, spring semester

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<th>Course Name</th>
<th>Credits</th>
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</thead>
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<tr>
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<tr>
<td>SLWK 713</td>
<td>Social Work Planning and Administrative Practice II</td>
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</tr>
<tr>
<td>SLWK 715</td>
<td>Research for Social Work Administration, Planning and Policy Practice II</td>
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</tr>
<tr>
<td>SLWK 794</td>
<td>Concentration Field Instruction</td>
<td>3</td>
</tr>
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</table>

**Total:** 15
<table>
<thead>
<tr>
<th>Elective</th>
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<tbody>
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<td></td>
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</tbody>
</table>

Information on the required sequencing of courses for the Structured Part-time Program is available upon request.
Special M.S.W. options

Study in the M.S.W. program combined with study in other programs or subjects can lead to students earning special certificates or additional degrees. Options are offered for a certificate in aging, for school social work certification, for a certificate in interdisciplinary early childhood intervention, for a nonprofit management certificate, for dual degree study in law, and for dual degree study in divinity or Christian education. Dual degree options are available only in Richmond.
Schools of Allied Health Professions and Social Work

M.S.W. and Certificate in Aging Studies

The School of Social Work in cooperation with the Department of Gerontology of the School of Allied Health Professions at VCU provides students with a unique educational opportunity in social work and gerontology. Master of Social Work students interested in work with the elderly or in gerontological programs may earn a Certificate in Aging Studies while completing the master’s degree requirements.

Students must meet the admission requirements of the Master of Social Work program of the School of Social Work and of the Certificate in Aging Studies program in the Department of Gerontology, School of Allied Health Professions. Admission into one program does not guarantee admission into the other. In order to meet the requirements of the M.S.W. degree and the Certificate in Aging Studies, students complete a total of 65 graduate credits. Students complete all foundation and concentration courses of the M.S.W. program, and core courses (nine credits) of the Certificate in Aging Studies. Other requirements are met by (1) completion of M.S.W. research courses with students undertaking a research project focused on aging, (2) completion of concentration field instruction practicum requirements (six credits) in a social work setting related to aging and (3) completion of an independent study course in gerontology that integrates research and practicum courses.

Additional information may be obtained from either of the following offices:

Department of Gerontology
School of Allied Health Professions
Virginia Commonwealth University
P.O. Box 980228
Richmond, VA 23298-0228
Attention: M.S.W.-Gerontology Certificate Adviser

School of Social Work
Virginia Commonwealth University
1001 W. Franklin St.
Richmond, VA 23284-2027
Attention: M.S.W.-Gerontology Certificate Adviser
M.S.W. and Certificate in School Social Work

Through a collaborative program with the VCU School of Education, students may meet Virginia Department of Education standards for certification as school social workers in Virginia in addition to meeting requirements for the M.S.W. degree. Students interested in certification in school social work should contact their adviser during the first semester of their program. In order to meet the requirements of the M.S.W. degree and the School Social Work certification option, students complete a total of 63 graduate credits including six credit hours of approved graduate courses in education.

Additional information may be obtained from:

School of Social Work
Virginia Commonwealth University
1001 W. Franklin St.
Richmond, VA 23284-2027
Attention: Certificate for School Social Work Adviser
M.S.W. and Certificate in Interdisciplinary Early Childhood Intervention

This is a 10- to 13-credit competency-based certificate that is offered by the Virginia Institute for Developmental Disabilities and the schools of Allied Health Professions, Education, Nursing, Social Work and the Department of Psychology in the College of Humanities and Sciences. Built on a strong base of advanced professional course and clinical work, students will be prepared to intervene with families and their children under the age of five who are at risk or have been identified with developmental delays.

In this certificate program M.S.W. students complete 63 credit hours of course work, including specialized courses in interdisciplinary work and directed study seminars. The certificate requires that students complete a clinical concentration practicum placement in an approved infant/early childhood field site. The course offerings and practicum are taken during concentration study in the master’s program. Interdisciplinary seminars provide opportunities for students to work with care providers in the helping disciplines to promote communication, coordination, advocacy and referral activities.

Additional information may be obtained from:

School of Social Work
Virginia Commonwealth University
1001 W. Franklin St.
Richmond, VA 23284-2027
Attention: Early Childhood Intervention Certificate Adviser
School of Social Work and the
College of Humanities and Sciences

M.S.W. and Certificate in Nonprofit Management

In cooperation with VCU Department of Public Administration

Through a cooperative arrangement with the L. Douglas Wilder School of Government and Public Affairs, M.S.W. students pursuing the Social Work Administration, Planning and Policy Practice (SWAPP) concentration may simultaneously earn the graduate certificate in nonprofit management offered by the L. Douglas Wilder School of Government and Public Affairs.

Certificate Requirements for M.S.W. students

Social work SWAPP concentration students are required to complete three nonprofit courses: PADM 656 Fund Development for the Nonprofit Sector (fall course); PADM 659 Financial Management for Nonprofit Organizations (spring course); and PADM 661 Nonprofit Law, Governance and Ethics (summer course) in the L. Douglas Wilder School of Government and Public Affairs.

Two social work SWAPP courses are substituted for six credit hours of the certificate’s 15 credit hour requirement. One of these courses is SLWK 712 Social Work Planning and Administrative Practice I. The second course can be SLWK 711 Strategies for Social Work Planning and Administrative Practice or SLWK 713 Social Work Planning and Administrative Practice II.

M.S.W. clinical concentration students must complete 15 course credits in nonprofit management. Six of the PADM nonprofit credits will satisfy the M.S.W. elective requirement for either concentration.

Application Process

To earn the Certificate in Nonprofit Management simultaneously with the M.S.W., it is necessary to complete a graduate school application for the certificate program; however, no supporting information or fees are required for students who are already enrolled in good standing in the social work master’s degree program.

Additional information may be obtained from:

School of Social Work
Virginia Commonwealth University
1001 W. Franklin St., Richmond, VA 23284-2027
Attention: Certificate in Nonprofit Management Adviser

Detailed information about the Certificate in Nonprofit Management can be obtained from Dr.
Janet Hutchinson, associate professor and director of the Master of Public Administration program, (804) 828-8041 or e-mail: jhutch@vcu.edu.

**In cooperation with George Mason University**

The School of Social Work, in cooperation with George Mason University’s Nonprofit Management Program located in Arlington, Va., provides students in the M.S.W. planning and administration concentration with a unique educational opportunity to obtain a Certificate in Nonprofit Management while completing the VCU Master of Social Work degree requirements.

Eligible M.S.W. students must have completed a minimum of 12 M.S.W. credits with a GPA of 3.3 or higher. Qualifying M.S.W. students are provided expedited admission to the certificate program after they complete a GMU application for Graduate Study, submit the application fee, supply an official VCU transcript and send the completed application to the GMU Graduate Admissions Processing Center for the College of Arts and Sciences.

In order to meet the requirements of both programs, students complete a total of 66 graduate credits that include all VCU M.S.W. foundation and required social work administration, planning and policy practice courses. The M.S.W. elective requirement is satisfied by two of the four required GMU certificate courses.

Additional information may be obtained from:

**Director, NOVA M.S.W. Program**

**VCU School of Social Work**

George Mason Professional Center
3401 N. Fairfax Drive, Third Floor
Arlington, VA 22201
M.S.W. and J.D.: Dual degree study in law and social work

Through a cooperative arrangement with the T. C. Williams Law School, selected students in either school may pursue a combined four-year curriculum of graduate study leading to the degrees of Master of Social Work and Juris Doctor. The program is established in recognition of the role of public law in social and economic life. The dual degree program prepares professionals versed in the values, knowledge and skills of both fields, bringing an integrated base of competency to the resolution of human and social problems.

Applicants must successfully meet the admission requirements of both schools and upon admission are assigned an adviser in each school. Students in dual degree study may begin the course work in either school, with the sequence of courses being determined by the point of entry.

The time normally required for completion of the integrated four-year curriculum is one academic year less than if each degree were taken separately. Elective courses will enable students to select areas in law and in social work which meet their particular interests. Application for admission must be made to each institution separately. Those interested should write both the Admissions Office of the T. C. Williams Law School, University of Richmond, VA 23173 and the Graduate School, Virginia Commonwealth University, Richmond, VA 23298-0568.
School of Social Work

M.S.W. and M.Div. dual degree study

This four-year professional degree program is offered by Virginia Commonwealth University in cooperation with Richmond Theological Consortium schools that include Union-Presbyterian School of Christian Education, Baptist Theological Seminary at Richmond, and Samuel DeWitt Proctor School of Theology at Virginia Union University. The purpose of the dual degree program is to prepare students for service in occupations where social work and the church’s ministries intersect; to enable social workers to perform and evaluate social work practices as they relate to biblical, theological, ethical, educational and pastoral perspectives; and equip graduates for various forms of ministry in which clinical and administrative skills in social work are critical.

This program requires four continuous years of study and leads to a Master of Social Work degree conferred by VCU and a Master of Divinity degree conferred by Union-PSCE, BTSR or STVU. Permission for part-time study must be given by the dual degree adviser at VCU and the appropriate theological school dean of faculty. All degree requirements must be completed within seven years of matriculation. Students can apply simultaneously to both programs and begin study at either institution following the approved curriculum plan; or, a student may begin at either VCU or the seminary and then apply for admission to the other school during the first year of study in accordance with application deadline dates.

The M.S.W. requires 60 credits that include the required integrating seminar and one course transferred from the seminary to satisfy a three-credit M.S.W. elective requirement. The integrative seminar is taken in the final year of study and is co-taught by a member of the VCU School of Social Work faculty and a member of a faculty of an RTC school. The seminar enables the student to integrate theoretical, social justice, empirical, ethical and practical dimensions of social work with the biblical, theological, educational and pastoral perspectives.

Prospective students apply to the VCU School of Social Work and one of the participating theological schools, must meet both sets of admission standards, and be accepted into both programs. For the M.S.W. program, refer to the "Admission to the master's degree program" section. For information about admission to an RTC master of divinity program, contact one of the following schools:

- Baptist Theological Seminary at Richmond
  3400 Brook Road
  Richmond, VA 23286-3446
  Telephone: (804) 345-BTSR (2877)

- Samuel DeWitt Proctor School of Theology
For information about the M.S.W./M.Div. program, contact the M.S.W. Program Director, 1001 W. Franklin St., Richmond, VA 23284-2027; (804) 828-1041. M.S.W. program applications can be obtained from the VCU Graduate School Web site at http://www.vcu.edu/graduate/ps/admission.html.
School of Social Work

M.S.W. and M.A. in Christian Education

Cooperative program with Union Theological Seminary and the Presbyterian School of Christian Education (Union-PSCE)

This program has been developed to prepare social workers for service in church-related institutions (children's homes, nursing homes, etc.), for planning and working in inner city settings, and for other ministries. Counseling, group work and educational skills are components of both programs.

This program requires three continuous years of study and leads to a Master of Arts degree conferred by the Union Theological Seminary and Presbyterian School of Christian Education, and a Master of Social Work degree from VCU. Typically, a student completes the first year at Union-PSCE, followed by two years at the VCU School of Social Work. In the final semester at VCU, students complete an integrative seminar at Union-PSCE. Both degrees are awarded at the end of the three years of study.

Application for admission must be made to each institution separately. Those interested should write both the Graduate School, Virginia Commonwealth University, Richmond, VA 23284-3051, and Director of Admissions, Union-PSCE, 1205 Palmyra Ave., Richmond, VA 23227.
Ph.D. in Social Work program

Conceptual framework and mission

VCU’s Ph.D. in Social Work Program is a research-oriented educational enterprise with a mission to develop scholars and leaders for education and practice in human services. Its vision is a program that builds and nurtures students’ intellectual curiosity, creativity and courage, as well as their desire to “make a difference.” The program is built around excellence in teaching, mentorship and socialization of students, as well as collaborative involvement in the program by its diverse faculty. Graduates of the program become active in teaching, consultation, research, practice and program evaluation, staff and program development, policy analysis, and advocacy. They are employed in universities and colleges, and in human service organizations and agencies at the local, state, national and international levels. In all the program’s activities and events, emphasis is placed on the following areas:

- the development of an intellectual community that values critical and creative thinking
- the connections among the philosophy of science, theory, research and practice
- the analysis and integration of knowledge and values, especially their relevance to diverse populations and issues of social justice

Educational objectives

The program’s specific educational objectives are achieved and demonstrated by the students through a number of formal and informal mechanisms: required and elective course work, independent study and directed research, a comprehensive exam process, and the dissertation process. The objectives are as follow:

- a critical understanding of multiple paradigms in the philosophy of science and the implications of these for contemporary research.
- mastery of a range of research methodologies and data analysis strategies, and competence in conducting independent inquiry on issues of importance to the field.
- competence in the analysis and application of a wide range of social, behavioral and practice theories.
- an ability to design and propose theoretically and empirically grounded models of social work intervention for coping with personal transitions and challenges, addressing social problems, and promoting equity and social justice.
- a critical understanding of the historical place of social work and social welfare in the evolution of social thought and cultural values.
- expertise in a chosen substantive area related to social work, including skills related to dissemination of this knowledge.
Admission to the Ph.D. program

Applicants to the program must have an earned master’s degree in social work or a closely related discipline and professional or practice-related experience relevant to their career goals. It is highly recommended that applicants have an M.S.W. and post-master’s social work policy or clinical practice experience. The application process includes submission of a completed application form, transcripts for all undergraduate and graduate studies, three references, recent Graduate Record Examination scores, a recent sample of written work and a personal statement describing the applicant’s motivation for participation in the program and outlining the relevancy of the applicant’s professional experience to his or her career objectives.

Potential applicants interested in testing their capacity for doctoral work or those whose application materials have not been completed for admissions review may request to take a class as a nondegree-seeking student. Three credit hours in an approved course taken on this basis may be applied toward the degree. Satisfactory performance as a nondegree-seeking student does not assure admission as a regular degree-seeking student. While it is possible to combine a limited amount of course work with outside employment, participants are expected to commit themselves to one year of full-time study prior to beginning dissertation work.

For application materials, write to: Doctoral Program Director, School of Social Work, P.O. Box 842027, Virginia Commonwealth University, 1001 W. Franklin St., Richmond, VA 23284-2027.

Requirements for the Ph.D. degree

A minimum of 38 credit hours of course work beyond the master’s degree plus a minimum of 16 credit hours of dissertation research is required. The course work includes 23 credit hours of content common for all students, and 15 credit hours of concentration content in a substantive area. The Graduate School requirements for candidacy exams and dissertation committees apply to students in this program. Up to six credit hours may be granted for courses completed at another university. Full-time students ordinarily complete 18-20 credit hours per academic year. Other requirements are detailed below.

Common curriculum

Curriculum that is required of all students consists of the following courses (23 credits):

SWKD 701 Quantitative Research Methods and Analysis I
SWKD 702 Quantitative Research Methods and Analysis II
SWKD 703 Philosophical Issues in Social Work Knowledge Building
SWKD 704 Multiparadigmatic Qualitative Methods and Analysis
SWKD 708 Social and Behavioral Science Foundations for Social Work
SWKD 710 Social Work, Social Welfare and Social Thought
SWKD 715 Development and Evaluation of Social Work Practice Theories and Models

Note: Many courses in the common curriculum are completed prior to moving onto more specialized concentration course work.

Concentration curriculum
The concentration curriculum allows students to specialize in a substantive area and increase their relevant research skills. This concentration consists of at least 15 hours of course work, including advanced statistics and research courses, and a directed research course designed to assist students in preparing for their dissertation research project. In addition to courses offered by the program, students are expected to enroll in appropriate courses in other schools and departments of the university with approval of their adviser.

Comprehensive exam/admission to candidacy

Upon completion of all required course work, participants will take a comprehensive exam under the supervision of a Comprehensive Examination Committee. Through the comprehensive examination, students must demonstrate the ability to integrate the whole of their educational experience by adequately addressing complex questions pertinent to the current and developing knowledge base of the human service field. Successful completion of the comprehensive exam results in candidacy status for the Ph.D. degree.

Dissertation

After admission to candidacy, students proceed to propose, complete and defend their dissertation. This is done under the supervision of a dissertation committee. Students are required to maintain continuous enrollment of at least three credit hours per semester (excluding summer) until they have attained 12 hours of dissertation credit, after which they may enroll for as few as one credit per semester. The dissertation must represent independent research and should be based on an original question or hypothesis relevant to social work. Successful defense of the dissertation completes the requirements for the degree.