

# PRE-MEDICAL GRADUATE HEALTH SCIENCES, CERTIFICATE IN (POST-BACCALAUREATE GRADUATE CERTIFICATE)

## Program goal

The pre-medical graduate health sciences certificate program in the School of Medicine provides an advanced level of didactic training in the biomedical sciences to enhance the preparation of students for a variety of career options, particularly professional degree training (i.e. M.D./D.O., D.D.S., M.S. and Ph.D.). The program also provides the opportunity for the development of an informed approach to the admission process in professional and/or advanced degree training to enhance the prospect of advancement.

## Student learning outcomes

1. Achievement of a threshold competency in the basic health sciences: The candidate will achieve/surpass expectations of a threshold-level competency in the basic health sciences, particularly in areas related to gaining admission to professional and/or higher-level degree programs.
2. MCAT/DAT preparation: The candidate will be prepared to take and/or retake standardized tests. The candidate will achieve a score that fulfills medical or dental school admission requirements.
3. Preparation for career advancement: The candidate who meets the threshold competency objective will display an enhanced level of advancement to higher levels of professional and/or advanced degree training.

## VCU Graduate Bulletin, VCU Graduate School and general academic policies and regulations for all graduate students in all graduate programs

The VCU Graduate Bulletin website documents the official admission and academic rules and regulations that govern graduate education for all graduate programs at the university. These policies are established by the graduate faculty of the university through their elected representatives to the University Graduate Council.

It is the responsibility of all graduate students, both on- and off-campus, to be familiar with the VCU Graduate Bulletin as well as the Graduate School website (<http://www.graduate.vcu.edu>) and academic regulations in individual school and department publications and on program websites. However, in all cases, the official policies and procedures of the University Graduate Council, as published on the VCU Graduate Bulletin and Graduate School websites, take precedence over individual program policies and guidelines.

Visit the [academic regulations section for additional information on academic regulations for graduate students](http://bulletin.vcu.edu/academic-regs). (<http://bulletin.vcu.edu/academic-regs>)

## Graduation requirements

As graduate students approach the end of their academic programs and the final semester of matriculation, they must make formal application to

graduate. No degrees will be conferred until the application to graduate has been finalized.

Graduate students and program directors should refer to the following graduation requirements as published in the Graduate Bulletin for a complete list of instructions and a graduation checklist.

Visit the [academic regulations section for additional information on graduation requirements](http://bulletin.vcu.edu/academic-regs/grad/graduation-info). (<http://bulletin.vcu.edu/academic-regs/grad/graduation-info>)

## Other information

### Applying to professional school and advanced graduate degree programs

Students must follow admission guidelines for applications to the M.D./D.O., M.S., D.D.S. and other programs. Completion of the certificate program does not afford a guaranteed admission to professional training programs at VCU. Exceptional performance, 3.5 GPA and a 28 MCAT guarantees an interview at VCU School of Medicine. Similar criteria increase eligibility for an interview at the VCU School of Dentistry.

**Advising:** Students are encouraged to seek opportunities for academic, personal and professional development from the Division for Academic Success, Career Services and the CERT Program Office. For students who choose to take a year off between CERT and professional school, several School of Medicine professors hire students for research positions and area hospitals offer SCRIBE programs that actively recruit VCU graduates. The CERT Program Office can also help identify possibilities.

**Letters of reference:** The CERT program adviser will provide a letter of reference for professional school applications. Students must schedule an appointment to interview with the program adviser for a letter.

**Apply online** at [graduate.admissions.vcu.edu](http://graduate.admissions.vcu.edu) (<http://www.graduate.admissions.vcu.edu>).

## Admission requirements

Degree:	Semester(s) of entry:	Deadline dates:	Test requirements:
Certificate	Fall	Jul 1	GRE, MCAT or DAT TOEFL for international students

## Special requirements

- While there is no official deadline for applying to the certificate program, the school strongly recommends applicants have all of materials into the graduate admissions office by July 1 to ensure that the file can be processed in time for the fall semester. The program has rolling admissions for a limited number of positions.

Applicants must meet all general admission requirements of the VCU Graduate School (<http://bulletin.vcu.edu/graduate/study/admission-graduate-study/admission-requirements>).

## Degree requirements

In addition to general VCU Graduate School graduation requirements (<http://bulletin.vcu.edu/academic-regs/grad/graduation-info>), students must complete a minimum of 27 graduate credit hours of course work with a minimum GPA of 3.0 (4.0 scale), with no more than 20 percent of the total credit hours at the C or below level. The curriculum is composed of six required courses (15 credit hours) and 12 credit hours of electives

spread over two semesters. The curriculum should be completed in one academic year (fall and spring semester).

Required and elective courses are drawn from departments within the School of Medicine: the departments of Anatomy and Neurobiology, Biochemistry and Molecular Biology, Human and Molecular Genetics, Microbiology and Immunology, Pharmacology and Toxicology, and Physiology and Biophysics. All courses are held on the MCV Campus. In addition to the elective courses shown other courses may be applied as electives with the approval of the course director.

## Curriculum requirements

### Required courses

Course	Title	Hours
PHIS 501	Mammalian Physiology	5
BIOC 503	Biochemistry, Cell and Molecular Biology	5
BIOC 504	Biochemistry, Cell and Molecular Biology	5
Total Hours		15

### Electives

Course	Title	Hours
ANAT 611	Histology	5
ANAT 612	Human Embryology	2
BIOL 530/HGEN 501	Introduction to Human Genetics	3
BIOS 543	Graduate Research Methods I	3
HGEN 502	Advanced Human Genetics	3
IBMS 690	Basic Health Sciences Research Seminar (or department-specific 690 course) (Recommended for students planning to apply to the CERT/M.S. program)	1
MEDC 533	Pharmacognosy	2
MICR 505	Immunobiology	3
MICR 616	Mechanisms of Viral and Parasite Pathogenesis	3
NEUS 609	Cellular and Molecular Neuroscience	4
PHIS 512	Cardiac Function in Health and Disease	3
PHTX 548	Drug Dependence	3
PHTX 536	Principles of Pharmacology and Toxicology	5

## Total graduate credit hours required (minimum) 27

### Graduate program director

Vacant - Contact Certificate program office for information.

### Additional contact

Judy Silberg, Ph.D.

Program adviser

jsilberg@vcu.edu

### Certificate program office

premedcert@vcu.edu

(804) 828-9501

**Program website:** [medschool.vcu.edu/graduate/premed\\_cert](http://medschool.vcu.edu/graduate/premed_cert) ([http://www.medschool.vcu.edu/graduate/premed\\_cert](http://www.medschool.vcu.edu/graduate/premed_cert))