

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

Program goal

The Certificate in Pre-medical Graduate Health Sciences program in the School of Medicine provides an advanced level of didactic training in the biomedical sciences that will 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 supports student success by providing Kaplan standardized test preparation for enrolled students, academic advising and application review, and workshops that foster an informed approach to the professional school admission process.

Student learning outcomes

Foundational Knowledge in Biomedical Sciences

- Demonstrate an advanced understanding of core biomedical science concepts including human gross anatomy, medical biochemistry, medical physiology, human embryology and histology applicable to the health professions
- Analyze how principles of physiology relate to human health and disease

Professional and Academic Readiness

- Apply effective strategies for approaching the medical admission process including personal statement writing, pre-application preparation to include readiness for standardized admissions tests and professional interviews
- Write a compelling and concise personal statement and engage in structured, professional communication that reflects readiness for a health professions environment
- Apply advanced oral and written communication skills necessary for clear and effective interactions within academic and professional settings
- Apply the standards of professionalism and ethical practice expected in medical and health professions settings

Critical Thinking and Evidence-Based Decision Making

- Apply evidence-based reasoning and problem-solving skills to make informed decisions within biomedical and health sciences contexts
- Apply scientific principles and critical thinking skills to solve complex problems in biomedical contexts
- Critically evaluate scientific literature, interpret data and incorporate relevant information into problem-solving scenarios appropriate for the health sciences
- Demonstrate knowledge of medical ethics and healthcare disparities and engage thoughtfully in discussions on current issues
- Demonstrate the ability to apply biological and chemical principles in medical scenarios to achieve competitive scores on the MCAT or DAT

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. (<https://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. (<https://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 other professional training programs at VCU.

M.D./D.D.S. program linkage: Students who demonstrate exceptional academic performance in the certificate program (3.5 GPA) and earn an MCAT score of 508 or higher are eligible for a guaranteed interview (to be used within two years of certificate completion) at the VCU School of Medicine. Pre-dental students who earn a 3.5 GPA in the certificate and a DAT score of 20 are eligible for early application file view at the VCU School of Dentistry.

M.S. program linkage: Certificate graduates are eligible to apply to one of six different Master of Science programs administered by basic science departments in the VCU School of Medicine. Course credits earned during enrollment in the certificate program can, with the master's program approval, be counted toward M.S. degree requirements. Admission into these master's programs is competitive and separate from the certificate program.

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 the certificate 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 options for clinical observerships and non-clinical community volunteer service.

Letters of reference: A certificate program adviser will provide an individualized letter of reference for professional school applications. Students are expected to get to know their adviser through one-on-one meetings and regular correspondence.

Program duration: The certificate is designed as a two-semester program and student are expected to complete all certificate requirements within one calendar year. Extensions may be approved by the program director on an individual, as-needed basis. Please contact the program if you are a non-traditional student who may require additional time to complete the program.

Apply online today. (<https://www.vcu.edu/admissions/apply/graduate/>)

Admission requirements

Degree:	Semester(s) of entry:	Deadline dates:	Test requirements:
Certificate	Fall	Jul 16	GRE, MCAT or DAT no more than five years old; TOEFL for international students
	Spring	Nov 15	

Special requirements

- While there is no official deadline for applying to the certificate program, the school strongly recommends applicants have all materials into the graduate admissions office by July 16 (for fall semester matriculation) or Nov. 15 (for spring semester matriculation) to ensure that the file can be processed in time for the appropriate semester. The program has rolling admissions for a limited number of positions.

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

Degree requirements

In addition to general VCU Graduate School graduation requirements (<https://bulletin.vcu.edu/academic-regs/grad/graduation-info/>), students must complete a minimum of 24 graduate credit hours of course work with a minimum final GPA of 3.0 (4.0 scale). 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. 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 program director.

Curriculum requirements

Course	Title	Hours
Required courses		
ANAT 609	Human Gross Anatomy	3
ANAT 611	Histology	4
ANAT 612	Human Embryology	2
PGHS 505	Medical Biochemistry	4
PGHS 510	Medical Physiology	4
PGHS 601	Professional Skills and Readiness I	3
PGHS 602	Professional Skills and Readiness II	1
Electives		3
Select 3 credits from:		
ANAT 608	Functional and Clinical Neuroanatomy	
DENS 606	Oral Research: Independent Study	
DENS 610	Fundamentals of Oral and Maxillofacial Radiology	
HGEN 501	Introduction to Human Genetics	
HGEN 620	Principles of Human Behavioral Genetics	
IBMS 635	Cellular Signalling	
IBMS 690	Basic Health Sciences Research Seminar	
IBMS 691	Special Topics in Interdisciplinary Biomedical Sciences	
IBMS 692	Special Topics in Interdisciplinary Biomedical Sciences	
MICR 505	Immunobiology	
PHIS 512	Cardiac Function in Health and Disease	
PHIS 697	Directed Research in Physiology	
PHTX 548	Drug Dependence	
PHTX 630	Basic Concepts in Pharmacology for Graduate Students	
PHTX 641	Introduction to Clinical Pharmacology	
Total Hours		24

The minimum number of graduate credit hours required for this certificate is 24.

Students who complete the requirements for this program will receive a Certificate in Pre-medical Graduate Health Sciences.

Contact

Certificate program office
 premedcert@vcuhealth.org (premedcert@vcu.edu)
 (804) 828-9501

Additional contact

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 Program director
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Program website: medschool.vcu.edu/education/graduate/certificate-programs/cert/ (<https://medschool.vcu.edu/education/graduate/certificate-programs/cert/>)