

Health Professions Program

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www.cmu.edu/hpp/ (<http://www.cmu.edu/hpp/>)

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Overview

The Health Professions Program (<http://www.cmu.edu/hpp/>) (HPP) at Carnegie Mellon University is an advising resource for all university students and alumni who are interested in a career in the health professions. This program complements a student's curricular advising and is meant to help students explore their interests, prepare for graduate programs in the health professions, and facilitate their application process. Students can enroll in the program at any time during their academic career, but the importance of early planning is communicated to interested first-year students. Once enrolled, students meet regularly with the director to discuss course requirements, medical exposure opportunities, and other aspects of preparing to be a competitive candidate.

Students in the HPP span all colleges of the university and have many diverse career interests including medicine, dentistry, optometry, biomedical research, medical physics, biomedical engineering, public health, medical informatics, and health policy.

For students interested in medicine or dental medicine, regardless of a student's major, the basic course requirements outlined below must be completed prior to matriculation.

Course Requirements

1. TWO (2) courses in Biology, plus ONE (1) lab, plus Biochemistry.

This is typically fulfilled by the following Carnegie Mellon courses:

03-121	Modern Biology	9-10
or 03-151	Honors Modern Biology	
03-135	Structure and Function of the Human Body	9
or 42-202	Physiology	
or 03-220	Genetics	
or 03-320	Cell Biology	
03-124	Modern Biology Laboratory	9-12
or 03-343	Experimental Techniques in Molecular Biology	
or 03-206	Biomedical Engineering Laboratory	
or 02-261	Quantitative Cell and Molecular Biology Laboratory	
03-231	Honors Biochemistry	9
or 03-232	Biochemistry I	

2. TWO (2) courses in Chemistry, plus ONE (1) lab.

This is typically fulfilled by the following Carnegie Mellon courses:

09-105	Introduction to Modern Chemistry I	10
or 09-107	Honors Chemistry: Fundamentals, Concepts and Applications	
09-106	Modern Chemistry II	10
or 09-348	Inorganic Chemistry	
09-207	Techniques in Quantitative Analysis (non-Chem majors)	9
or 09-221	Laboratory I: Introduction to Chemical Analysis	

3. TWO (2) courses in Organic Chemistry, plus ONE (1) lab.

This is typically fulfilled by the following Carnegie Mellon courses:

09-217	Organic Chemistry I	9-10
or 09-219	Modern Organic Chemistry	
09-218	Organic Chemistry II	9-10
or 09-220	Modern Organic Chemistry II	
09-208	Techniques for Organic Synthesis and Analysis (non-Chem majors)	9
or 09-222	Laboratory II: Organic Synthesis and Analysis	

4. TWO (2) courses in Physics, plus ONE (1) lab.

This is typically fulfilled by the following Carnegie Mellon courses:

33-121	Physics I for Science Students	12
or 33-141	Physics I for Engineering Students	
or 33-151	Matter and Interactions I	
33-122	Physics II for Biological Sciences and Chemistry Students	9
or 33-142	Physics II for Engineering and Physics Students	
or 33-152	Matter and Interactions II	
33-100	Basic Experimental Physics	6-9
or 33-104	Experimental Physics	

5. Any TWO (2) Math courses, including at least ONE (1) stats course.

21-111	Differential Calculus	10
21-112	Integral Calculus	10
21-120	Differential and Integral Calculus	10
21-122	Integration and Approximation	10
36-200	Reasoning with Data	9
or 36-202	Methods for Statistics & Data Science	
or 36-309	Experimental Design for Behavioral & Social Sciences	

6. TWO (2) courses in English.

This is typically fulfilled by the following Carnegie Mellon courses:

76-101	Interpretation and Argument (or any two of 76-106/7/8)	9
76-xxx	English course of the student's choice, typically 200-level or higher	

Additional Requirements

In addition to these general course requirements, recommended coursework includes microbiology, developmental biology, anatomy, behavioral sciences, ethics, history, and modern languages. Interdisciplinary studies are also strongly encouraged, and many students design an undergraduate curriculum that incorporates majors and/or minors in both the natural and social sciences. For medical school admissions, completing either Introduction to Psychology or Social Psychology is strongly encouraged to help prepare for the MCAT exam.

Participating in research is a hallmark of the educational experience at Carnegie Mellon. Whether in a psychology lab studying the impact of breast cancer diagnosis on family social dynamics, in the NMR lab imaging metabolic function in the heart or brain, evaluating key signaling factors in cancer cells, or in the surgery suite testing robotic devices, our students have made significant achievements in research. Health Professions programs are interested in applicants who have experience with the scientific method and who are intellectually curious about biomedical science, social science, biomedical engineering, as well as public health, epidemiology, and the social determinants of health.

Our university mission is to train students to be first class scientists, engineers, artists, writers or whatever their intellectual interests may be. We do not train students to be "pre-med," but if they choose to use their talents in a health profession, we offer many services to help them obtain their life goals. Regular advising, application workshops, and networking are among the many resources the CMU HPP provides. The student pre-health organizations on campus: Doctors of Carnegie Society (DOCS); Student Diversity Inclusion Committee (SDIC); Alpha Epsilon Delta (AED); Global Medical Brigades; and Global Public Health Brigades, together with the HPP, provide students with opportunities to learn, explore, and prepare for their chosen area of professional interest. For pre-medical applicants, the CMU

alumni have created the MSAMP (Medical School Alumni Mentor Program), which seeks to enhance the application experience for all CMU applicants to medical school.

The HPP has been successful in helping students to define, prepare for, and obtain their professional goals. Our students are regularly accepted at top-level medical, dental and graduate programs, and our alumni continue to serve as outstanding ambassadors of Carnegie Mellon.