

MEDICAL SCIENCE M.S.

All students must meet the Requirements for the Master's Degree (<http://catalogue.uvm.edu/graduate/degreerequirements/requirementsforthemastersdegree/>)

OVERVIEW

The goal of the Master of Science in Medical Science Program is to provide a rigorous curriculum in the basic biomedical sciences that prepares students with the background knowledge and skills required to gain acceptance into and succeed in healthcare-related professional degree programs such as medical, dental, or pharmacy programs. The program offers a cohesive set of core courses in biomedical disciplines that together provide foundational understanding of human structure and function. Courses provide graduate-level training in biochemistry, cell biology, anatomy, and physiology as well as pharmacology and evidence-based medicine.

The faculty below are in addition to those who have been formally appointed Graduate Faculty members:

Akselrod, Dmitry; Assistant Professor, Department of Radiology; MD, SUNY Upstate Medical University

Geeslin, Matthew; Assistant Professor, Department of Radiology; MD, University of Minnesota

Morris, Erin; Assistant Professor, Department of Obstetrics, Gynecology and Reproductive Sciences; MD, University of Utah School of Medicine

SPECIFIC REQUIREMENTS

Requirements for Admission to Graduate Studies for the Degree of Master of Science

Applicants are required to have a B.S. or B.A. from accredited college or university, 2 semesters of general biology, general physics, general chemistry, and organic chemistry. International Students are required to submit scores for TOEFL or IELTS.

Minimum Degree Requirements

UVM's Master of Medical Science degree is a 30-credit program that is designed to be completed within 1 year (12 months). Students complete Core Course Requirements, 1 anatomy, 1 biostatistics and additional electives to complete the 30-credit program.

Core Courses:		
BIOC 301	General Biochemistry	3
CLBI 301	Cell Biology	3
MPBP 301	Human Physiology & Pharm I	4
BIOC 302	General Biochemistry	3
PHRM 308	Integrative Physiol. & Pharm.	3
The following anatomy course or others as approved by the Director:		
ANNB 300	Human Gross Anatomy	6

1 from the following statistics course or others as approved by the Director:		
CTS 302	Quality in Healthcare	
CTS 325	Multi Analysis Clin&Trans Res	
PH 303	Biostatistics I:App Rsch in PH	
PSYS 304	Adv Statistical Methods I	
Choose at least 2 electives from the following or other health-related courses approved by the Director (core and elective credits must combine for an overall total of at least 30 credits):		
BIOC 351	Proteins I: Structure&Function	
BIOC 372	Cancer Biology	
MMG 222	Advanced Medical Microbiology	
MMG 223	Immunology	
MMG 225	Eukaryotic Virology	
MPBP 310	Molecular Control of the Cell	
MPBP 390	Medical Master's Capstone (only 1 Capstone course allowed)	
NSCI 302	Neuroscience	
OBGY 200	Understanding Human Pregnancy	
PH 301	Public Health & Health Policy	
PH 302	Epidemiology I	
PH 303	Biostatistics I:App Rsch in PH	
PH 304	Environmental Public Health	
PH 305	Pol,Org & Finance in Hlth Care	
PH 306	Social&Behavioral Public Hlth	
PH 307	Epidemiology 2	
PH 312	Food Systems & Public Hlth	
PH 322	One Health: Zoonoses	
PHRM 200	Medical Cannabis	
PHRM 240	Molecules & Medicine	
PHRM 272	Toxicology	
PHRM 290	Topics Molecular&Cell Pharm	
PHRM 305	Milestones in Pharmacology	
PHRM 390	Medical Master's Capstone (only 1 Capstone course allowed)	
SURG 200	Emergency Medicine Research I	

Comprehensive Examination

Students must complete a comprehensive exam, integrating their knowledge of core course material in a written paper, by their end of their final semester in the program.

Requirements for Advancement to Candidacy for the Degree of Master of Science

Successful completion of a comprehensive examination in Medical Science.