MEDICAL SCIENCES, M.S.

The Master of Science in Medical Sciences program helps graduates who wish to gain admission to medical school or other health profession programs. This is a rigorous course of study aimed at improving the strength of graduates' application to medical school. Students take courses with medical students from much of the program. The Saint Louis University School of Medicine offers a guaranteed interview for the Medical Sciences M.S. students who meet certain criteria, and who submit an application to the School of Medicine. The program also offers academic advising focused on the preparation and enhancement of medical school applications and dedicated learning support.

Curriculum Overview

The Master of Science in Medical Science is a rigorous one-year master's degree that mirrors the structure of the first year of medical school. This program helps students interested in obtaining admission to medical school improve their application and helps students prepare for the level of rigor they will encounter in medical school.

There is a significant focus on active learning in the master's program, which prepares students to engage in the kind of active learning that is prominent in contemporary medical education.

Students complete the following courses during the master's program:

- Human Gross Anatomy
- Human Histology and Ultrastructure
- Human Embryology
- Human Systems Neurobiology
- Human Systems Physiology
- Epidemiology and Biostatistics
- Introduction to Pathology
- Principles of Immunology, Pharmacology, and Therapeutics
- Master's Capstone

Field and Research Opportunities

During the Master of Science in Medical Science program, opportunities are available to engage in either service, research, or clinical shadowing opportunities. These will be fit to the student's interests and needs. Engaging in service, research, or clinical shadowing is not required to complete the master's program. However, participation in service during the master's program is needed to qualify for the guaranteed interview with the School of Medicine.

Careers

The Master of Science in Medical Science primarily prepares students for application to medical school. It also may prepare students for entry to other health-profession schools, such as nursing, physician assistant, and dentistry programs. Students who do not pursue a career in health professions may explore graduate Ph.D. studies, or may explore careers in biomedical sciences, education or in the private sector.

A guaranteed interview with the Saint Louis University School of Medicine is offered to students who meet certain metrics and submit an application to the School of Medicine. Present criteria for a guaranteed interview include:

1. Maintaining a GPA of 3.25 or above per semester in the MSMS program.
2. MCAT of 498 or greater.
3. Clinical shadowing/clinical experience and community service activities prior to participation in the MSMS program. Research is strongly encouraged but not required.
4. Participating in at least 20 hours of local community service (approved by the director) during the MSMS program.
5. Upholding standards of professionalism.

Admission Requirements

- Overall Undergraduate GPA of 3.0 or science GPA of 2.8
- Official transcripts
- Minimum MCAT 495 OR a minimum GRE score of 40th percentile may be accepted for students not interested in pursuing admission to M.D. or D.O. schools.
- Demonstrated clinical and volunteer experiences.
- 1 letter of recommendation
- Successful completion of all prerequisite courses required by SLU School of Medicine for admission. View the School of Medicine Requirements and Standards here (https://www.slu.edu/medicine/medical-education/md/admissions/requirements-standards.php).

Tuition

Tuition	Cost Per Credit
Graduate Tuition	$1,370

Additional charges may apply. Other resources are listed below:

Net Price Calculator (https://www.slu.edu/financial-aid/tuition-and-costs/calculator.php)

Information on Tuition and Fees (https://catalog.slu.edu/academic-policies/student-financial-services/tuition/)

Miscellaneous Fees (https://catalog.slu.edu/academic-policies/student-financial-services/fees/)

Information on Summer Tuition (https://catalog.slu.edu/academic-policies/student-financial-services/tuition-summer/)

Learning Outcomes

1. Describe prenatal human development with an emphasis on the correlation of normal embryological development with common congenital malformations.
2. Identify and describe the microscopic and ultrastructural features of the human body with an emphasis on clinical application of the structure and function of tissues and organs.
3. Describe the physiological principles and mechanisms of the human body with an emphasis on normal function and key homeostatic processes within cells, tissues and organ systems.
4. Identify and describe the normal structure and function of the human body with an emphasis on anatomical relationships and clinical significance.
5. Identify and describe the structure and function of the human nervous system with an emphasis on functional neuroanatomical

systems, concepts of key neurobiological processes, and correlation of clinical presentation with nervous system lesions.

6. Describe the pathophysiological basis for disease processes commonly encountered in clinical medicine.
7. Describe basic concepts related to medical epidemiology, statistics, and the role of evidence from research in clinical medical practice.

Requirements

Code	Title	Credits
ANAT 5000	Human Gross Anatomy	6
ANAT 5100	Human Histology and Ultrastructure	5
ANAT 5200	Human Embryology	2
ANAT 5300	Human Systems Neurobiology	5
ANAT 5400	Human Systems Physiology	4
MED 5100	Molecular Foundations in Medicine	2
MED 5110	Epidemiology and Biostatistics	1
MED 5140	Introduction to Pathology	2
MED 5150	Principles of Immunology, Pharmacology, and Therapeutics	1
MED 5960	Master's Capstone	2
Total Credits		**30**

Non-Course Requirements

Students should participate in the Journal club/seminar (non-credit requirement) the fall and spring semesters of their program.

Continuation Standards

Students must maintain a cumulative grade point average (GPA) of 3.00 in all graduate/professional courses.

Roadmap

Roadmaps are recommended semester-by-semester plans of study for programs and assume full-time enrollment unless otherwise noted.

Courses and milestones designated as critical (marked with !) must be completed in the semester listed to ensure a timely graduation. Transfer credit may change the roadmap.

This roadmap should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor/mentor each semester. Requirements, course availability and sequencing are subject to change.

Course	Title	Credits
Year One		
Summer		
ANAT 5000	Human Gross Anatomy	6
MED 5100	Molecular Foundations in Medicine	2
	Credits	**8**
Fall		
ANAT 5200	Human Embryology	2
ANAT 5100	Human Histology and Ultrastructure	5
ANAT 5400	Human Systems Physiology	4
MED 5140	Introduction to Pathology	2
MED 5110	Epidemiology and Biostatistics	1
Journal club/seminar		
	Credits	**14**
Spring		
MED 5150	Principles of Immunology, Pharmacology, and Therapeutics	1
ANAT 5300	Human Systems Neurobiology	5
MED 5960	Master's Capstone	2
Journal club/seminar		
	Credits	**8**
	Total Credits	**30**

Contact Us

For more information about the Medical Sciences, M.S., please email anatomy@health.slu.edu or the program coordinator at patricia.anderson@health.slu.edu.