

# MEDICAL SCIENCE, M.S.

**Department Chair:** Dale Connally

**Program Director:** Jacob Brewer

The Master of Science (MS) program in Medical Science is a specialized master's program designed to prepare graduates to pursue further academic training in medicine, dentistry, other professional health schools, by completing a rigorous combination of multidisciplinary courses. The MS Medical Science program is designed to elevate student's qualifications for professional programs.

## Admission Requirements

Students may have a bachelor's degree in any field but must include typical science courses. A strong science background is encouraged. The program will not fulfill undergraduate medical-based professional school prerequisites. Prior to admission, applicants must have completed the following pre-requisite courses, all with grades of a C or better.:

- General Biology I & II
- General Chemistry I & II
- General Physics I & II
- Biochemistry and Organic Chemistry I & II
- Statistics

Must have a minimum cumulative GPA of 3.0. The applicant will be notified to record a video interview if meeting the minimum criteria.

Standardized test scores (optional): GRE or MCAT or DAT

Personal Statement – one page statement that highlights your strength as an applicant, motivation for this program, and relevant extracurricular activities

2 letters of recommendation (one from a science faculty member). Applicants who have previously applied to medical school may use the same documents to apply to this program.

The one-year MS in Medical Science program will be a minimum of 32-33 credit hours and will be a non-thesis program with three-term admission cycle (Spring, Summer, Fall) to accommodate different start date of medical-based professional schools.

Code	Title	Hours
<b>Required STEM Coursework</b>		
BIO 5432	(Cardiopulmonary Physiology)	4
MSMS 5300	Biostatistics	3
MSMS 5500		5
MSMS 5220	(Pathophysiology)	2
MSMS 5350	(Pharmacology)	3
<b>Additional STEM Coursework (only for pre-med and pre-dent)</b>		
MSMS 5341	(Principles of Biochemistry)	3
MSMS 5401	(Microbiology & Immunology)	4
<b>Other Required Coursework:</b>		
MSMS 5201	Introduction to Clinical Research & Evidence-based Decision Making	2
MSMS 5202	(Intro to Physical Exam Skills & Patient Communication)	2
MSMS 5250	Medical Ethics from a Christian Perspective	2

MSMS 5260	(U.S. Health Industry & Health Disparities in the United States)	2
MSMS 5100	(Seminar)	1
<b>Electives (6-7 hrs for non pre-medical and pre-dental):</b>		
MSMS 5425	(Physiology of Human Visceral Systems)	
MSMS 5335	(Neuromuscular Physiology)	
MSMS 5355	(Anatomy of Head and Neck)	
MSMS 5306	(Anatomical Kinesiology)	
MSMS 5307	(Biomechanics)	
Total		33

## Degree Plan

### Year 1

Spring Semester		Hours
MSMS 5300	Biostatistics (Medical/Biostatistics)	3
MSMS 5430	Cardiopulmonary Physiology	4
MSMS 5201	Introduction to Clinical Research & Evidence-based Decision Making (Intro to Clinical Research & Evidenced Based Decision Making)	2
MSMS 5202	Intro to Physical Exam Skills & Patient Communication	2
<b>Hours</b>		<b>11</b>

### Summer Semester

MSMS 5500	Advanced Human Anatomy	5
MSMS/BIO 5220	Pathophysiology	2
MSMS/BIO 5341	Principles of Biochemistry or Elective	3
<b>Hours</b>		<b>10</b>

### Fall Semester

MSMS 5350	Pharmacology	3
MSMS 5250	Medical Ethics from a Christian Perspective	2
MSMS 5260	U.S. Health Industry & Health Disparities in the United States	2
MSMS/BIO 5401	Microbiology & Immunology or Elective	4
MSMS 5100	Seminar	1
<b>Hours</b>		<b>12</b>

**Total Hours 33**

Code	Title	Hours
<b>Electives</b>		
MSMS 5425	(Physiology of Human Visceral Systems)	4
MSMS 5335	(Neuromuscular Physiology)	3
MSMS 5355	(Anatomy of Head and Neck )	3
MSMS 5306	(Anatomical Kinesiology)	3
MSMS 5307	(Biomechanics)	3