

MSBS IN MEDICAL SCIENCE

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The **Master of Science in Biomedical Science with focus in Medical Sciences (MSBS-MS)** is a one-year postbaccalaureate graduate program at The University of Toledo College of Medicine and Life Sciences (UTCMLS) designed to provide students who have completed all prerequisites for medical school with resources to strengthen their academic credentials as they prepare their applications to U.S. medical schools. The MSBS-MS curriculum concentrates on an organ-systems based approach where clinical and graduate faculty train students in the pathophysiology of disease and pharmacological interventions, incorporating material taught to medical students during the first (M1) and second (M2) years of the medical school curriculum. This approach imprints in our students a foundational knowledge on the MD curriculum and, since pathophysiology of disease is a key component of USMLE exams, it prepares students for better performance in the M1/M2 curriculum and on Step 1 and Step 2 exams. The MSBS-MS program also provides a unique opportunity for students to conduct clinical and/or basic science research experience. UToledo's basic and clinical science faculty mentor students through their year-round Scholarly Project, allowing students to expand their view on experimental sciences, adding a strong component to their academic credentials

- Applicant must be a U.S. Citizen or U.S Permanent Resident (greencard holder)
- Baccalaureate degree from an accredited college or university
- All premed coursework required for admission to medical school must be completed prior to admission into the MSBS-MS program
 - Official MCAT score (500 or higher is recommended) taken no earlier than December, 3 years prior to the expected year of matriculation into medical school.
 - Official undergraduate transcripts confirming degree submitted directly to the College of Graduate Studies
- GPA of 3.0 or greater is recommended
- One letter of recommendation
 - Committee recommendation letters are accepted with all signatures
 - Recommendation letters must include your full name
 - Recommendation letters submitted to medical school are not accepted.
- Personal statement
 - Personal Statements submitted from medical school admission are not accepted. A new career goals personal statement is required for MSBS-MS admission.
 - Personal Statements must include your full name
- University of Toledo College of Graduate Studies online application
 - Application Fee submitted at the time of online application

First Term		Hours
ANAT 5000	Anatomy	4
INDI 5450	Molecular Cell Biology	7
PUBH 6001	Biostatistics for Medical Sciences	3

INDI 6980	Scholarly Project for Medical Sciences	1
Hours		15
Second Term		
INDI 5350	Pathophysiology of Organ Systems	10
INDI 5650	Immunology and Medical Microbiology	4
INDI 6980	Scholarly Project for Medical Sciences	1
Hours		15
Third Term		
INDI 6020	On Being a Scientist	1
INDI 6920	Student Seminar Series	1
INDI 6980	Scholarly Project for Medical Sciences	6
Hours		8
Total Hours		38

Program total minimum of credits for MSBS degree in Medical Science is 38 credits.

- PLO 1. MSBS-MS students will assess and integrate concepts from a variety of sources including lecture-based, research-based and practice-generated information.
- PLO 2. MSBS-MS students will be able to explain human physiology and pathophysiology through an organ systems-based approach.
- PLO 3. MSBS-MS students will engage in volunteering work – community, clinical setting – to enhance their exposure to and experience in service and diversity.
- PLO 4. MSBS-MS students will collaborate with M1 students - admitted to the UT MD degree program from the MSBS-MS class- to discuss medical school curriculum, identify volunteering/shadowing opportunities, and develop peer interaction and leadership skills.