

Medical Laboratory Science, BS

MLT to MLS

The Bachelor of Science with a major in medical laboratory science (MLS) earned through the medical laboratory technology to medical laboratory science (MLT to MLS) pathway requires 124 s.h., including 47-50 s.h. of credit for the major. Students must hold a valid American Society for Clinical Pathology (ASCP) Medical Laboratory Technician (MLT) certification or an American Medical Technologists (AMT) MLT certification and an Associate of Applied Science (AAS) in medical laboratory technology. They must maintain a grade-point average (GPA) of at least 2.00 to earn a BS in medical laboratory science at the University of Iowa.

The program is designed to provide a seamless academic pathway for certified MLTs to advance their education and professional standing by completing a bachelor's degree in MLS. Students build on their previous MLT education and experience by completing coursework in statistics, computing, physiology, higher-level biological and chemical sciences, and laboratory management. This combination of advanced science and leadership-focused coursework prepares graduates for supervisory roles, educational opportunities, and eligibility for the Medical Laboratory Scientist (ASCP) or (AMT) certification examination.

Students completing the BS through the MLT to MLS pathway must complete the same general education requirements as MLS students completing a subprogram; see General Education Requirement in this section of the catalog.

The MLT to MLS pathway to a BS in medical laboratory science requires the following coursework.

Courses Required for the Major

Course #	Title	Hours
BMB:3110	Biochemistry	3
BIOL:1411	Foundations of Biology	4
BIOL:1412	Diversity of Form and Function	4
CHEM:1110	Principles of Chemistry I	4
CHEM:1120	Principles of Chemistry II	4
HHP:2400	Fundamentals of Human Physiology	3
MATH:1005	College Algebra (or more advanced math course)	4
MICR:3147	Immunology and Human Disease	3
PATH:4201	Laboratory Management	3
One of these:		
MICR:3164	Microbiology and Human Health	4
MICR:2157 & MICR:2158	General Microbiology and General Microbiology Laboratory	5
One of these:		
HHP:1400	Human Anatomy and Physiology	3
HHP:2100	Human Anatomy	3

One of these:

CHEM:2210	Organic Chemistry I	3
CHEM:2230	Organic Chemistry I for Majors	3

One of these:

BAIS:1500	Business Technology and Artificial Intelligence	2
CS:1020	Principles of Computing	3

One of these:

STAT:1020	Elementary Statistics and Inference	3
STAT:1030	Statistics for Business	4

MLT to MLS 2+2 Agreements

The MLT to MLS pathway includes 2+2 agreements with area community colleges in Iowa for qualifying MLT graduates to seamlessly transfer to the Carver College of Medicine to finish their Bachelor of Science in medical laboratory science in two years.

The MLT to MLS pathway provides access to baccalaureate education for MLTs throughout the state. The 2+2 partnership provides enhanced opportunities for unparalleled leadership experience.

See MLT to MLS tab on the Medical Laboratory Science Program page of the Carver College of Medicine website for more information about agreements with multiple higher education institutions around the state of Iowa.