Medical Laboratory Science, BS

Program Description

Utah Tech University offers a course of study leading to a Bachelor of Science in Medical Laboratory Science degree. During the first two years or *pre-professional phase of study* a student completes a minimum of 58 semester hours of coursework. The coursework includes but is not limited to: a) general education courses, including a statistic course; b) biology requisites that must include a course in microbiology and courses in human anatomy and physiology; and c) cognates in chemistry. After completion of the pre-professional phase of study and, through a competitive application process, a student may be selected to enter the final two years of study or the *MLS professional program* to which one cohort of 12-15 students is admitted per year. Admitted students spend three semesters completing MLS-specific courses on the Utah Tech campus. Upon successful completion of these courses, students are then assigned to one or more program-affiliated medical laboratories to complete a semester-long clinical internship. Program graduates are eligible to take the Medical Laboratory Scientist (MLS) national board certification examination offered by the American Society for Clinical Pathology (ASCP).

Certification

Graduates are eligible to take the Medical Laboratory Scientist (MLS) national certification examination offered by the American Society for Clinical Pathology (ASCP).

Professional Licensure/Certification (PLC) Requirements

The curriculum for programs at Utah Tech University leading to professional licensure are designed to prepare students for Utah licensure and certification requirements. Admission into programs for professions requiring licensure and certification does not guarantee that students will obtain a license or certificate. Licensure and certification requirements are set by agencies that are not controlled by or affiliated with the University, and licensure and certification requirements can change at any time.

Licensure boards in each state establish requirements for licensure and certification for their respective state. States vary by which professions are required to be licensed and how licensure functions, and such requirements may change at any time. The terms related to licensure and certification, among others, also vary by state as well.

Students and prospective students are strongly encouraged to contact the state licensure entity in the state where they intend to work to review all licensure and certification requirements imposed by the student's state(s) of choice. The University cannot provide verification of a student's ability to meet licensure or certification requirements unrelated to its educational programming. Some states require individuals to complete additional requirements that are unrelated to educational prerequisites. For more information, visit the State Authorization and Professional Licensure (https:// academics.utahtech.edu/state-authorization/) web page and select the program, or speak to the director of the program.

Utah Tech University shall not be held liable if a student is unable to qualify for licensure or certification in any jurisdiction.

This disclosure is made pursuant to 34 CFR §668.43(a)(5)(v)(C).

Accreditation

The Medical Laboratory Science program is accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS). NAACLS can be contacted at:

NAACLS 5600 North River Road, Suite 720 Rosemont, IL 60018 Phone: 773-714-8880 www.naacls.org (http://www.naacls.org/)

Admission Requirements

For admission requirements into the Medical Laboratory Science program, visit the website (https://health.utahtech.edu/mls/programadmissions/) (following this link will take you out of the University Catalog).

Program Curriculum

120-122 credits

Utah Tech General Education Requirements

All Utah Tech General Education requirements must be fulfilled. A previously earned degree may fulfill those requirements, but courses must be equivalent to Utah Tech's minimum General Education standards in American Institutions, English, and Mathematics.

General Education Core Requirements (catalog.utahtech.edu/programs/generaleducation/#gerequirementstext)

Code	Title	Hours
English		3-7
Mathematics		3-5
American Institutions		3-6
Life Sciences		3-10
Physical Sciences		3-5
Fine Arts		3
Literature/Humanities		3
Social & Behavioral Sciences		3
Exploration		3-5
Code	Title	Hours
MLS Prerequisite Courses		-
BIOL 1610 & BIOL 1615	Principles of Biology I (LS) and Principles of Biology I Lab (LAB)	5
BIOL 2060	Principles of Microbiology	4
& BIOL 2065	and Principles of Microbiology Lab	
BIOL 2320	Human Anatomy	5
& BIOL 2325	and Human Anatomy Lab	4
BIOL 2420 & BIOL 2425	Human Physiology and Human Physiology Lab	4
Chemistry Requirement:		10-15
10 Credits of Chemistry: 5 credits in Elementary General Chemistry with lab and 5 credits in Elementary Organic/Biochemistry with lab		
OR		
CHEM 1110	Elementary General/Organic Chemistry (PS)	
& CHEM 1115	and Elem General/Organic Chemistry Lab (LAB)	
& CHEM 1120	and Elem Organic / Bio Chemistry	
& CHEM 1125	and Elem Organic/Bio Chemistry Lab	
OR		
CHEM 1210	Principles of Chemistry I (PS)	
& CHEM 1225	and Principles of Chemistry I Lab (LAB)	
& CHEM 1220 & CHEM 1225	and Principles of Chemistry II and Principles of Chemistry II Lab	
& CHEM 2310	and Organic Chemistry I	
& CHEM 2315	and Organic Chemistry I Lab	
COMM 1020	Public Speaking	3
or COMM 2110	Interpersonal Communication (SS, GC)	
MATH 1040	Introduction to Statistics (MA)	3
or STAT 2040	Business Statistics	
MATH 1050	College Algebra / Pre-Calculus (MA)	4

Highly Recommended:

BIOL 3470 Introduction to Immunology (Not Required, Prerequisites: BIOL 3010 and BIOL 3040 and CHEM 3510)

Please see the department website (https://health.utahtech.edu/mls/program-admissions/)for information on admission to the Medical Laboratory Science program.

Code	Title	Hours
MLS Core Requirements		
MLS 3310	Immunohematology I	5
MLS 3312	Clinical Immunology	4
MLS 3314	Diagnostic Microbiology I	5
MLS 3330	Clinical Chemistry	5
MLS 3555	Research Seminar	2
MLS 3850	Urinalysis and Body Fluids	2
MLS 4110	Laboratory Management/Edu	2
MLS 4200	Clinical Chemistry and Molecular Diagnostics	4
MLS 4300	Clinical Hematology	5
MLS 4320	Hemostasis	4
MLS 4330	Clinical Chemistry Practice (ALPP)	4
MLS 4400	Immunohematology II	4
MLS 4410	Blood Banking Practice (ALPP)	4
MLS 4414	Clinical Microbiology Practice (ALPP)	4
MLS 4423	Clinical Hematology Practice	4
MLS 4600	Diagnostic Microbiology II	4

Graduation Requirements

- 1. Complete a minimum of 120 college-level credits (1000 and above)
- 2. Complete at least 40 upper-division credits (3000 and above)
- 3. Complete at least 30 upper-division credits at Utah Tech for institutional residency.
- 4. Cumulative GPA 2.0 or higher.
- 5. Complete MLS professional program requirements
 - a. Meet Essential Requirements (https://health.utahtech.edu/mls/program-admissions/)
 - b. 80% or higher for all MLS courses
 - c. Cumulative GPA 3.0 or higher in MLS core courses.
 - d. Complete clinical training