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 statistics 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.dixie.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.dixie.edu/mls/program-admissions/) (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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>English</td>
<td>3-7</td>
</tr>
<tr>
<td></td>
<td>Mathematics</td>
<td>3-5</td>
</tr>
<tr>
<td></td>
<td>American Institutions</td>
<td>3-6</td>
</tr>
<tr>
<td></td>
<td>Life Sciences</td>
<td>3-10</td>
</tr>
<tr>
<td></td>
<td>Physical Sciences</td>
<td>3-5</td>
</tr>
<tr>
<td></td>
<td>Laboratory Science</td>
<td>0-1</td>
</tr>
<tr>
<td></td>
<td>Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Literature/Humanities</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social &amp; Behavioral Sciences</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Exploration</td>
<td>3-5</td>
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### MLS Prerequisite Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOL 1610 &amp; BIOL 1615</td>
<td>Principles of Biology I (LS) and Principles of Biology I Lab (LAB)</td>
</tr>
<tr>
<td>BIOL 2060 &amp; BIOL 2065</td>
<td>Principles of Microbiology and Principles of Microbiology Lab</td>
</tr>
<tr>
<td>BIOL 2320 &amp; BIOL 2325</td>
<td>Human Anatomy and Human Anatomy Lab</td>
</tr>
<tr>
<td>BIOL 2420 &amp; BIOL 2425</td>
<td>Human Physiology and Human Physiology Lab</td>
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</tbody>
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**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 & CHEM 1115 & CHEM 1120 & CHEM 1125 | Elementary General/Organic Chemistry (PS) and Elem General/Organic Chemistry Lab (LAB) and Elel Organic / Bio Chemistry and Elem Organic/Bio Chemistry Lab |
- OR
  - CHEM 1210 & CHEM 1215 & CHEM 1220 & CHEM 1225 & CHEM 2110 & CHEM 2115 | Principles of Chemistry I (PS) and Principles of Chemistry I Lab (LAB) and Principles of Chemistry II and Principles of Chemistry II Lab and Organic Chemistry I and Organic Chemistry I Lab |
- COMM 1020 or COMM 2110 | Public Speaking and Interpersonal Communication (SS, GC) |
- MATH 1040 or STAT 2040 | Introduction to Statistics (MA) and Business Statistics |
- MATH 1050 | College Algebra / Pre-Calculus (MA) |

**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.dixie.edu/mls/program-admissions/) for information on admission to the Medical Laboratory Science program.

### MLS Core Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>MLS 3310</td>
<td>Immunohematology I</td>
</tr>
<tr>
<td>MLS 3312</td>
<td>Clinical Immunology</td>
</tr>
<tr>
<td>MLS 3314</td>
<td>Diagnostic Microbiology I</td>
</tr>
</tbody>
</table>
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.dixie.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