This is a limited enrollment program requiring departmental admissions approval. Please see the department office for information regarding requirements for admission to this major.

For students entering the degree program during the 2020-2021 curricular year.

BS in Medical Laboratory Science (285220) MAP Sheet
Life Sciences, Microbiology and Molecular Biology
For students entering the degree program during the 2020-2021 curricular year.

For students entering the degree program during the 2020-2021 curricular year.

Minimum residence hours required 30.0
Minimum hours needed to graduate 120.0
### REQUIREMENT 1
Complete 13 courses

**PROGRAM PREREQUISITES:**
- *CHEM 105 - General College Chemistry 1 with Lab (Integrated)* 4.0
- CHEM 106 - General College Chemistry 2 3.0
- CHEM 107 - General College Chemistry Laboratory 1.0
- CHEM 285 - Introductory Bio-organic Chemistry 4.0
- MMBIO 102 - Introduction to Clinical Laboratory Techniques 1.0
- *MMBIO 121 - General Biology: Health and Disease* 3.0
- MMBIO 221 - General Microbiology 3.0
- MMBIO 222 - General Microbiology Laboratory 1.0
- MMBIO 240 - Molecular Biology 3.0
- MMBIO 241 - Molecular and Cellular Biology Laboratory 1.0
- MMBIO 261 - Infection and Immunity 3.0
- PWS 340 - Genetics 3.0

### REQUIREMENT 2
Complete 10 courses

- MMBIO 405 - Basic Laboratory Operations in Medical Laboratory Science 1.0
- MMBIO 406 - Clinical Chemistry 4.0
- MMBIO 407 - Clinical Microbiology 5.0
- MMBIO 409 - Hematology 3.0
- MMBIO 410 - Hematology Laboratory 2.0
- MMBIO 411 - Molecular Diagnostics 3.0
- MMBIO 412 - Immunohematology 4.0
- MMBIO 418 - Medical Parasitology 2.0
- MMBIO 419 - Clinical Parasitology Laboratory 1.0
- MMBIO 491 - Concept Applications in Laboratory Medicine 1.0

### REQUIREMENT 3
Complete 2.0 hours from the following course(s)

**COMPLETE AN INTERNSHIP EXPERIENCE. DURING ONE SEMESTER AND ONE TERM, COMPLETE AT LEAST 2 HOURS FROM THE FOLLOWING:**

- MMBIO 496R - Clinical Experience 12.0v
  - You may take up to 2 credit hours

### REQUIREMENT 4
Complete an exit interview.

### REQUIREMENT 5
Pass the BYU comprehensive exam offered during the clinical experience.

### RECOMMENDED
Complete 2 courses

**ALTHOUGH NOT REQUIRED, THESE COURSES ARE RECOMMENDED.**

- STAT 121 - Principles of Statistics 3.0

### WRTG 316 - Technical Communication 3.0

### THE DISCIPLINE:
This degree program is for students who desire to practice clinical laboratory science/medical technology in diagnostic laboratories or related options. The program in clinical laboratory science is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (8410 West Bryn Mawr Avenue, Suite 670, Chicago, IL 60631, 773-714-8880). Program graduates are eligible for National Certification examinations (i.e., ASCP, NCA).

### OBJECTIVE:
At career entry, the clinical laboratory scientist/medical technologist will be proficient in performing the full range of clinical laboratory tests in areas such as hematology, clinical chemistry, immunohematology, microbiology, serology/immunology, coagulation, molecular, and other emerging diagnostics, and will play a role in the development and evaluation of test systems and interpretive algorithms. The clinical laboratory scientist / medical technologist will have diverse responsibilities in areas of analysis and clinical decision-making, regulatory compliance with applicable regulations, education, and quality assurance/performance improvement wherever laboratory testing is researched, developed, or performed. The clinical laboratory scientist/medical technologist will also possess basic knowledge, skills, and relevant experiences in:
- a. Communication to enable consultative interactions with members of the healthcare team, external relations, customer service, and patient education;
- b. Financial, operations, marketing, and human resource management of the clinical laboratory to enable cost-effective, high-quality, value-added laboratory services;
- c. Information management to enable effective, timely, accurate, and cost effective reporting of laboratory-generated information, and;
- d. Research design/practice sufficient to evaluate published studies as an informed consumer.

### CAREERS:
Medical Laboratory Scientist in a Hospital laboratory, Outpatient lab or a Reference Lab; Quality Control/Assurance officer in clinical laboratory; MLS in a Clinical Diagnostic Molecular Laboratory; Clinical Laboratory Information System analyst; Physician Office Laboratory; Management in a Clinical Laboratory; MLS Specialty in Clinical Hematology, Chemistry, Immunohematology or Microbiology; Graduate Studies; Veterinary Medicine Laboratory Scientist; Medical Laboratory Industry – instrumentation sales and service; MLS Educator; Research Scientist; Pathology Assistant Studies

See faculty advisor for additional career choices.

### HONORARY SOCIETIES AND CLUBS:
The student chapter of the Utah Society for Clinical Laboratory Science provides opportunity for fellowship and professional association.

### FINANCING:
An endowed scholarship is available to students in clinical laboratory science. Recipient is selected by CLS faculty after program admission. No application is necessary.

### MAP DISCLAIMER
While every reasonable effort is made to ensure accuracy, there are some student populations that could have exceptions to listed requirements. Please refer to the university catalog and your college advisement center/department for complete guidelines.

### DEPARTMENT INFORMATION
**Microbiology and Molecular Biology**
Brigham Young University
4007 Life Sciences Building
Provo, UT 84602
Telephone: (801) 422-2889