Medical Laboratory Technology

Medical Laboratory Technologists perform complex analyses of specimens such as cells or body fluids using lab equipment like microscopes, cell counters, and centrifuges. Clinical laboratory workers study medical microbiology, clinical chemistry, hematology, and immunology. They interpret test results, ensure proper collection of samples, and communicate accurate test results to physicians or nurses.

At Colorado Mesa University, admission into the Associate of Applied Science degree in Medical Laboratory Technology (MLT) is competitive and requires a separate application process with selective admission requirements and set application deadlines. Once accepted, the program is completed in three semesters, plus summer phlebotomy courses for any students who aren’t already certified phlebotomists. The final semester is a clinical internship at an affiliated site in western Colorado. The majority of MLT courses are delivered in a hybrid format. Lectures are delivered online with lab sessions held on campus. Graduates are eligible to take the Medical Laboratory Technician national certification exam through the American Society of Clinical Pathologists (ASCP).

A person in this career field may:
- Examine specimens like body fluids and cells using biomedical laboratory equipment
- Analyze samples to discover any abnormalities or illness or to evaluate their content
- Perform quality control and maintenance on instrumentation and ensure its sterility
- Keep accurate records of tests and their results using computers
- Communicate with other healthcare professionals about test results
- Collect blood or tissue samples from patients and match them for transfusions or test them to determine how a patient is responding to treatment
- Prepare cells or tissue samples for further analysis by pathologists
- Prepare cultures, solutions, or reagents to test samples

Major Skills & Characteristics

- Strong math and science background
- Problem-solving skills
- Verbal and written communication skills
- Knowledgeable about operating and maintaining equipment
- Math skills
- Critical thinking skills
- Ability to make decisions
- Leadership and decision-making skills
- Ability to collaborate and adapt
- Detail-oriented
- Ability to perform repetitive tasks
- Ability to work well with other members of the healthcare team
Organizations That Commonly Employ Medical Laboratory Technology Majors

- Ambulatory Health Care Services
- Blood Banks
- Clinical/Diagnostic Laboratories
- Fertility Centers
- Government Organizations
- Hospitals
- Manufacturers of diagnostic testing kits and laboratory equipment and supplies
- Medical Laboratories
- Pharmaceutical Manufacturers
- Physicians’ Offices
- Public Health Agencies
- Research/Forensic Laboratories
- Reference Laboratories
- Transplant and Blood Donor Centers

Related Careers

- Biochemistry Technologist
- Biotechnician
- Blood and Plasma Laboratory Assistant
- Blood Bank Laboratory Technician
- Chemistry Technologist
- Chief Medical Technologist
- Clinical Laboratory Manager
- Clinical Laboratory Scientist (CLS)
- Clinical Laboratory Technologist
- Clinical Medical Technologist
- Clinical Research Assistant
- Cytogenetic Technologist
- Cytotechnologist
- Differential Specialist
- Hematology Technician
- Hemodialysis Technician
- Histology Technician
- Histopathology Technician
- Immunohematologist
- Immunology Technologist
- Laboratory Assistant
- Laboratory Supervisor
- Laboratory Technician
- Laboratory Worker
- Medical Chief Technician
- Medical Lab Assistant
- Medical Laboratory Technician
- Medical Laboratory Technologist
- Medical Numerical Control Operator
- Medical Technician
- Medical Technologist
- Microbiology Technician
- Neurology Technician
- Pathologist Assistant
- Pathology Laboratory Technician
- Pathology Technician
- Pharmaceutical Laboratory Technician
- Pharmaceutical Sales Representative
- Phlebotomist
- Research Assistant
- Serology Technician
- Specimen Processor
- Tissue Technician
- Toxicology Laboratory Technician
- Vascular Technician

*Note: Some of the occupations listed above may require additional education, experience, or training beyond a Bachelor’s Degree. To research these occupations use the Career Research Resources links below.*
Career Research Resources:

*Use these sites to research information about specific occupations such as nature of the work, training or qualifications, employment or job outlook, projections, earnings and wages.*

**O*NET-Online:** [http://www.onetonline.org](http://www.onetonline.org)

The U.S. Department of Labor
- In the occupational search box type in key words, job titles, or occupational codes to research various careers.


The Bureau of Labor Statistics
- Use the A-Z index to select the occupation you are researching.

**My Future.com:** [http://www.myfuture.com](http://www.myfuture.com)

The Department of Defense
- This site compiles information from departments of **Commerce**, **Education** and **Labor**.

**Organizations and Associations Links**
- American Association for Clinical Chemistry: [www.aacc.org](http://www.aacc.org)
- National Accrediting Agency for Clinical Laboratory Services: [www.naacs.org](http://www.naacs.org)
- American Association of Bioanalysts: [www.aab.org/aab/MLT.asp](http://www.aab.org/aab/MLT.asp)
- American Medical Technologists: [www.americanmedtech.org](http://www.americanmedtech.org)
- American Society for Clinical Laboratory Science: [www.ascls.org](http://www.ascls.org)
- American Society for Clinical Laboratory Science - Colorado: [www.asclscolorado.org](http://www.asclscolorado.org)
- American Society for Clinical Pathology: [www.ascp.org](http://www.ascp.org)
- American Society of Cytopathology: [www.cytopathology.org](http://www.cytopathology.org)

**Job Listings/Job Search Sites:**
- American Association for Clinical Chemistry Career Center: [http://careercenter.aacc.org/jobs](http://careercenter.aacc.org/jobs)
- Comp Health: [www.comphealth.com](http://www.comphealth.com)
- Health Jobs Start Here: [www.healthjobsstarthere.com/my](http://www.healthjobsstarthere.com/my)
- Healthcare Job Connection: [www.hospitaljobsonline.com](http://www.hospitaljobsonline.com)
- Health Careers Network: [www.healthecareers.com](http://www.healthecareers.com)