

Medical Laboratory Science

The Medical Laboratory Science major focuses on the study and application of laboratory techniques used to diagnose and treat diseases. Students learn to analyze blood, urine, tissue samples, and other specimens to detect abnormalities and support medical diagnoses. This major prepares graduates for roles in clinical laboratories, research, and healthcare settings. Typical industry sectors include healthcare, hospitals, diagnostics, research institutions, and public health, where they contribute to patient care, medical research, and disease prevention.

Job Title Examples:

- Medical Laboratory Technician
- Clinical Laboratory Assistant
- Laboratory Technologist
- Phlebotomist
- Medical Research Assistant
- Histology Technician
- Microbiology Technician
- Cytology Technician
- Blood Bank Technician
- Pathology Assistant

Hard and Soft Skills Needed:

Hard Skills:

1. Laboratory Testing Techniques
2. Microscope Operation
3. Blood and Urine Analysis
4. Clinical Chemistry
5. Quality Control Procedures

Soft Skills:

1. Attention to Detail
2. Critical Thinking
3. Communication
4. Problem-Solving
5. Time Management

Further Education/Training Required and/or Suggested:

A BS in Medical Laboratory Science qualifies students for entry-level roles, but additional training or certifications can enhance career prospects:

To Enter the Field:

1. Certification from the American Society for Clinical Pathology (ASCP) or American Medical Technologists (AMT):
 - Required for many positions as a Medical Laboratory Scientist (MLS).

To Advance:

1. Specialized Certifications (e.g., in microbiology, hematology, or blood banking):
 - Can open doors to more specialized roles.
2. Master's Degree or Advanced Certifications:
 - For roles in laboratory management or advanced clinical research.

Summary:

Certification from ASCP or AMT is essential to enter the field, while additional specialized certifications or a master's degree can aid career advancement.

Professional or Student Associations:

- American Medical Technologists (AMT)
- Clinical Laboratory Management Association (CLMA)