

# BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES

## Overview

The Bachelor of Science in Medical Laboratory Sciences program provides an excellent career opportunity to join one of the fastest-growing professions in healthcare. A total of 124 credit hours is required to award the degree. This includes 60 credit hours of core curriculum and program prerequisites, and 64 credit hours of program curriculum. The program curriculum is designed to provide entry-level competencies in the four core disciplines of clinical chemistry, hematology, immunohematology, and microbiology. Medical laboratory science professionals analyze blood, tissue, body fluids, and other patient specimens using high-complexity testing to generate accurate laboratory data that are needed to aid in detecting cancer, heart attacks, diabetes, infectious mononucleosis, and the identification of bacteria or viruses that cause infections, as well as in detecting drugs of abuse. In addition, MLS professionals monitor testing quality and consult with other members of the healthcare team. Prospective students do not require any healthcare experience to be considered. The professional clinical phase includes 520 hours of in-hospital clinical practice.

Upon completion of the program, graduates are eligible to sit for the Medical Laboratory Scientists national board examination administered by the Board of Certification of the American Society for Clinical Pathology (ASCP).

## Tracks within the Bachelor of Science in Medical Laboratory Sciences

The Bachelor of Science in Medical Laboratory Sciences offered by The University of Texas at San Antonio provides two tracks of study: Entry to the Profession (Traditional Track) (<http://catalog.uthscsa.edu/schoolofhealthprofessions/medicallaboratorysciences/bsmls/traditional/>) and the Advanced Standing Track (<http://catalog.uthscsa.edu/schoolofhealthprofessions/medicallaboratorysciences/bsmls/advanced/>).

The Traditional Track is designed for individuals pursuing a bachelor's degree in MLS.

The Advanced Standing Track is designed for an individual who attended a NAACLS approved Medical Laboratory Technician school, has an associate's degree, and is certified by the Board of Certification of the ASCP as a MLT(ASCP).

## Objectives/Program Outcomes

### Students graduating from the Bachelor of Science in Medical Laboratory Sciences program will be able to:

- Demonstrate communication skills sufficient to serve needs of patients, colleagues, members of patient care team and the public.
- Perform laboratory tests using sophisticated instrumentation on body fluids, cells, and other specimens accurately and efficiently.
- Use quality control data and procedures to evaluate the validity and reliability of laboratory test results.

- Correlate laboratory test results, recognize the presence of a problem (e.g., reagents, instrumentation, controls, personnel) and take appropriate corrective action.
- Determine the significance of laboratory test results through an understanding of physiologic functions, principles, techniques, and methods related to clinical laboratory practice.
- Exhibit ethical and professional behavior appropriate for the delivery of patient care.
- Participate in continuing education to enhance personal competency and impart knowledge to others
- Use the principles of method evaluation in the selection of new test methods and instrumentation
- Apply educational principles and methodologies to teaching/learning situations involving students, colleagues, patients, members of patient care team, and the public
- Recognize basic principles of administration and supervision as they relate to clinical laboratory practice
- Apply principles of safety and governmental regulations and standards related to clinical laboratory practice

## Program Policies and Information

### Advancement to the Second Year

A student must have no grade lower than a C in required science and medical laboratory sciences courses to begin the second year and begin clinical practicums. In addition, a MLS student must file an *Advancement to Clinical Practicums* form, available from the program director at the end of the semester before practicums begin. A student must also demonstrate a proficiency of "meets expectations" for all behaviors in the *Professional Behaviors Evaluation* at the time they are otherwise eligible for enrollment in clinical practicums. Failure to demonstrate a proficiency of "meets expectations" may result in dismissal from the program. Students who are ready for clinical practicums are placed based on availability of positions at the affiliate sites throughout South Texas. All students are expected to complete at least one practicum at an affiliate located outside of San Antonio. In the unlikely event that there are not enough sites available for the number of students ready to enter practicums, assignments will be made according to program policies. Students who must remediate a practicum will be assigned to an affiliate on a space-available basis.

### Advisement and Schedule Planning

Applicants are encouraged to seek advisement from their college counselors or the School of Health Professions Office of Admissions and Special Programs at (866) 802-6288 (toll-free) or (210) 567-6220. Students who complete lower-division course work at another college or university are urged to seek advisement about coursework that will fulfill program requirements well in advance of applying to the health science center. Students must be advised each semester before permission is given to enroll in professional courses. For students in any Medical Laboratory Sciences program, sequencing and completion of specific courses are very important.

### Certification

Students who successfully complete the BS in Medical Laboratory Sciences program are eligible to take the Medical Laboratory Scientists national certification exam given by the Board of Certification (<https://www.ascp.org/content/board-of-certification/>) (BOC) of the American Society for Clinical Pathology.

## Credit by Examination

Students enrolled in the BS in Medical Laboratory Sciences program may attempt to earn credit by examination according to the policy and procedures in the School of Health Professions section of this *Catalog*. Students who have college credit for MLT coursework are eligible to take “challenge examinations.” Students who are certified MLTs (ASCP), have completed a MLT program accredited by NAACLS, and have an associate degree are not required to take challenge examinations. Challenge examinations must be passed with a grade of 70% or better for credit to be earned. For detailed information about eligible courses, fees, schedules, and procedures, contact the program director.

## Placement Examinations

Individuals who have certification from Board of Certification (<https://www.ascp.org/content/board-of-certification/>) (BOC) as a MLT(ASCP), have graduated from an accredited MLT program with an associate degree, and are entering the second year of the BS in MLS may be given placement examinations to determine areas of discipline strengths and weaknesses.

## Practicum Assignments

Clinical practicum assignments provide the student with a breadth of experiences that encompass all major content areas and exposure to laboratory technology. Assignment to clinical affiliates for practicum courses is a random process that is based on availability of positions at the affiliate sites. Practicum courses typically begin in the fall semester and are completed during the spring semester.

***All students are expected to complete at least one practicum at an affiliate located outside of San Antonio.*** If a student declines to go to an assigned affiliate, this will result in a loss of the student's practicum position and possible delay of graduation. Students who have special needs and request specific considerations for practicum assignments must put the request in writing to the program director at least one semester before the practicum begins. The program director will take the request to the faculty who will approve or disapprove the request.

## Program Costs

In addition to required tuition and fees, there are costs for textbooks, scrubs, and equipment. Detailed information about program costs can be found on the Bachelor of Science in Medical Laboratory Sciences website.

## Transfer of Credits

Agreements for transferable coursework exist with some area colleges and universities. Students should contact the program director of the health science center's Medical Laboratory Sciences Program or the biology advisor at their institution to determine if such an agreement exists with their school.

For additional information, see the policies and procedures in the School of Health Professions section of this *Catalog*.