

Bachelor of Science in Medical Laboratory Science

The student preparing for a career in medical laboratory science completes a minimum of 120 semester hours of academic work.

Students complete 96 semester hours toward the Bachelor of Science in Medical Laboratory Science (BSMedLabSci) degree before advancing to the clinical education practicum requirement in the final year in which they enter a National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) accredited Medical Laboratory Science (MLS) program for an additional 12 to 16 months of clinical education. After successful completion of the clinical education practicum requirement, the student is awarded the Bachelor of Science in Medical Laboratory Science from the University and is eligible to take the national certification examination administered by the American Society for Clinical Pathology (ASCP) Board of Certification (BOC). Successful completion of this exam results in national certification as a Medical Laboratory Scientist.

The purpose of this degree program is to meet the increasing demand for laboratory professionals in hospital and clinic laboratories, research, industry, public health, education, and laboratory management. Medical laboratory science is also an excellent foundation for graduate study in medicine, dentistry, management, education, and other disciplines.

All students must complete a sequence of general education; major requirements, which include clinical education practicum requirements; and special requirements, which include electives.

Major Requirements

- a. Core curriculum[†]
- b. One of the following foreign language/culture choices:
 - i. Beginning level proficiency coursework, or the equivalent, in a foreign language.
 - ii. First course in a foreign language and a three-semester-hour course in the culture of the same language area.
 - iii. Two three-semester-hour courses in one foreign culture area; the courses must be chosen from an approved list available in the dean's office and the college advising centers.
- c. Mathematics 408R and Statistics and Data Sciences 320E
- d. Either Biology 311C, 311D, and 325, or Biology 315H and 325H
- e. Molecular Biosciences 226L, 326M, 330 or Integrative Biology 446L, Molecular Biosciences 344 or 366R, 360K, 260L, 361, 361L, and Integrative Biology 365S
- f. Chemistry 301 or 301C, 302 or 302C, 204, 320M, 320N + 220C or 455, and Biochemistry 369
- g. Computer Science 303E, Management Information Systems 302F
- h. Completion of the clinical education practicum, which requires a minimum of 24 semester hours of clinical education coursework selected from the following:
 - Medical Laboratory Science 155M, 255M, 355M, 455M, 555M, 655M, 755M, 855M, 955M (any topic)
 - Medical Laboratory Science 156M, 256M, 356M, 456M, 556M, 656M, 756M, 856M, 956M

*Students must consult with their advisor before enrolling in clinical education coursework requirements

Clinical Education Practicum Requirement

To advance to the clinical education practicum, medical laboratory science (MLS), students must: 1) complete a minimum of 96 semester hours of coursework, 2) have the approval to advance to the clinical education practicum by the university program director, and 3) apply to and be accepted into a MLS clinical education program, which requires 12 to 16 months of clinical education in a program of medical laboratory science (or clinical laboratory science) accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

During the clinical education practicum, the MLS clinical education program director works closely with the University and each student to ensure their success in the program. The University verifies completion of coursework and grades upon completion of the MLS clinical education program. MLS clinical education coursework must be approved by the University to be counted toward the degree. Coursework completed in the MLS clinical education program may be used to fulfill clinical education practicum requirements only and applies solely to the Bachelor of Science in Medical Laboratory Science degree.

Affiliated University Program

Students completing the MLS clinical education program offered by an affiliated university register for and complete clinical education coursework at the affiliated university. During the practicum, students remain enrolled at UT Austin, which remains the home institution. Upon completion of the practicum, MLS clinical education coursework credit completed at the affiliated university program is transferred to the University to count toward the Bachelor of Science in Medical Laboratory Science degree at UT Austin.

Non-University Affiliated Program (Hospital-Based)

Students completing the MLS clinical education program offered by a program that is not university-based, such as a hospital, enroll each semester in clinical education coursework at UT Austin and complete coursework off-campus at their specific MLS clinical education program's location.

Special Requirements

The student must take elective coursework, if necessary, to complete a minimum of 96 semester hours of academic work required for advancement to the clinical education practicum requirement for the Bachelor of Science in Medical Laboratory Science.

Students must fulfill both the University's [General Requirements](#) for graduation and the [college requirements](#). They must also earn a grade of at least C- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00. Students must also earn a grade of at least C- or receive a passing grade for each pass/fail course taken in the 12 to 16-month clinical education program of medical laboratory science (or clinical laboratory science) accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). More information about grades and the grade point average is given in the [General Information Catalog](#).

Order and Choice of Work

The student should consult with their academic and faculty advisors each semester regarding order and choice of work and balancing the laboratory load. To complete the program within four years, it may be necessary for the student to take some courses during the summer.

† Effective April 2025, UT Austin no longer requires Skills and Experience flags.