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 the final year, the student advances to the clinical education practicum requirement, 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 core curriculum; general education; major requirements, which include clinical education practicum requirements; and special requirements, which include electives.

Core Curriculum

All students must complete the University’s Core Curriculum. A single course may not be counted toward more than one core area, but in some cases a course that is required for the major may also be counted toward the core curriculum.

Skills and Experience Flags

In the process of fulfilling degree requirements, all students must complete courses that carry skills and experience flags in the following areas:

1. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
2. Quantitative reasoning: one flagged course
3. Global cultures: one flagged course
4. Cultural diversity in the United States: one flagged course
5. Ethics: one flagged course
6. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the Course Schedule. They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisors.

Foreign Language

One of the following foreign language/culture choices:

1. Beginning level proficiency coursework, or the equivalent, in a foreign language.
2. First course in a foreign language and a three-semester-hour course in the culture of the same language area.
3. 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.

Major Requirements

1. Mathematics 408R and Statistics and Data Sciences 320E
2. Either Biology 311C, 311D, and 325, or Biology 315H and 325H
4. Chemistry 301 or 301C, 302 or 302C, 204, 320M, 320N + 220C or 455, and Biochemistry 369
5. Computer Science 303E, Management Information Systems 302F
6. Completion of the clinical education practicum, which requires a minimum of 24 semester hours of clinical education coursework selected from the following:*  
   • NSC 155M, NSC 255M, NSC 355M, NSC 455M, NSC 555M, NSC 655M, NSC 755M, NSC 855M, NSC 955M (any topic)  
   • NSC 156M, NSC 256M, NSC 356M, NSC 456M, NSC 556M, NSC 656M, NSC 756M, NSC 856M, NSC 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 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, MLS clinical education program director works closely with each student to ensure their success in the program. The MLS clinical education program director verifies completion of coursework and grades upon completion of the MLS clinical education program.

MLS clinical education coursework must be approved by the university faculty advisor for medical laboratory science and the college dean 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.

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, students submit their transcript from the affiliated university to UT Austin to transfer completed MLS clinical education coursework to count toward the Bachelor of Science in Medical Laboratory Science degree.
Students completing the MLS clinical education program offered by a program that is not university-based, such as a hospital or medical laboratory, enroll in clinical education coursework at UT Austin and complete coursework off-campus at their specific MLS clinical education program's location under the supervision of university faculty.

**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.