



Medical Laboratory Technician, AAS Degree - 67 credits

Program Area: Health (Fall 2025)

The Medical Laboratory Technician program begins once per year fall semester.

Applications will be accepted until the program is full.

Program Description

The Medical Laboratory Technician (MLT) program provides students with entry level knowledge and technical skills required to work as an MLT. Medical Laboratory Technicians are healthcare professionals who perform complex laboratory testing and use critical thinking to ensure the accuracy of laboratory results on blood and other body fluid samples. The results provided by the MLT aid physicians in the diagnosis and treatment of disease. The Medical Laboratory Technician performs laboratory tests in transfusion services, chemistry, coagulation, hematology, immunology, microbiology, and urinalysis using microscopes, chemical reagents, clinical instruments, and computer systems. Upon completion of this program, the student will be eligible to sit for the national certification examination generally required for employment as an MLT. Graduates of this program, who have subsequently obtained national certification, may articulate to the Medical Laboratory Science (MLS) Bachelor of Science (BS) degree program through St. Cloud State University. Students who already have a BS degree can earn their MLS through certification after completing their MLT degree.

Pre-Program Courses

Course	Course Title	Credits	Term
ALTH 1410	Medical Terminology	1	
BIOL 1140	Human Anatomy and Physiology I	4	
BIOL 1141	Human Anatomy and Physiology II	4	
CHEM 1110 or CHEM 1210	Aspects of Chemistry I or General Chemistry I (MLS track)	3 (5)	
ENGL 1106	College Composition I	3	
MTLN 1574	Collection Skills	3	
PSYC or SOC	Any PSYC or SOC course from Goal Areas 5 or 7	3	

Required Courses

Course	Course Title	Credits	Term
BIOL 1170	Microbiology	3	
MLTN 1400	Introduction to Medical Laboratory Techniques and Instrumentation	2	
MLTN 1410	Immunology and Serology	3	
MLTN 1424	Urinalysis and Body Fluids	3	
MLTN 1420	Hematology	3	
MTLN 1422	Medical Microbiology	4	
MTLN 1426	Immunochemistry	2	
MLTN 1428	Clinical Chemistry	2	
MLTN 1430	Molecular Diagnostics	1	
MLTN 2420	Special Hematology	3	
MLTN 2422	Special Medical Microbiology	2	
MLTN 2426	Special Immunochemistry	2	
MLTN 2428	Special Clinical Chemistry	2	
MLTN 2444	Medical Laboratory Skill Development	2	
MLTN 2500	Medical Lab Technician Seminar	1	
MLTN 2505	Medical Lab Tech Clinical Practicum	11	

Total Credits

67

Courses may require a pre-requisite. Refer to course outline or check with an advisor.

Program Outcomes

- Comply with laboratory safety and compliance procedures and policies.
- Describe principles, operations, and maintenance of laboratory equipment and instruments.
- Demonstrate preparedness for entry level employment as an MLT including professional behavior and effective communication skills.
- Correlate laboratory findings to common disease processes.
- Demonstrate standard specimen collection and processing practices employed in medical laboratory professions.
- Identify pre-analytical, analytical, and post-analytical variables that affect test accuracy and take appropriate action.
- Perform mathematical functions as required by laboratory procedures.
- Perform a variety of diagnostic and screening test procedures according to standard operating procedures.
- Relate basic discipline principles (hematologic, chemical, immunologic, etc.) to laboratory test procedures and test results.

Qualified applicants should be aware that program class sizes are limited, which may delay acceptance into the program. You may be required to complete additional (or less) coursework, dependent upon the results of your Computerized Placement Test (CPT) and/or previous coursework completed, or certifications awarded.

General Education courses that are required may be taken prior to entering the program, as long as the specific prerequisites for that course have been met. Prior to taking any Medical Laboratory Technician required program courses, all pre-program courses listed must be completed with a GPA of 2.8 or better. A minimum of "C" is required in all college level courses. All program courses must be completed with a "C" or better to advance to the next semester.

Pre-Program Requirements

Successful entry into this program requires a specific level of skill in the areas of English, mathematics, and reading. Program entry will depend, in part, on meeting the prerequisites listed below.

English/Reading:

- Completion of ENGL 1106 - College Composition I, may not be taken concurrently with Semester I coursework.

Mathematics:

- Completion of MATH 0970 - Intermediate Algebra with a "C" or better (or equivalent or higher). MATH 0970 may not be taken concurrently with Semester I coursework.

NOTE: You will need current immunizations and current negative Tuberculosis (TB) screening prior to starting clinical practicum. Students are not required to complete CPR training, but completion of BLS CPR training is highly encouraged. Background Study approval is required from the State of Minnesota/or Wisconsin. A national criminal background study is also required.

Program Accreditation

The Medical Laboratory Technician program is accredited by the [National Accrediting Agency for Clinical Laboratory Sciences](#), (NAACLS). NAACLS is located at: 5600 N River Road, Suite 720, Rosemont, IL 60018. [Email](#), Telephone: 773-714-8880

Program Articulation: St. Cloud State University, Medical Laboratory Science Program (Bachelor of Science)
College of St. Scholastica, Natural Sciences BA

For more information about the Medical Laboratory Technician AAS including course descriptions, course prerequisites, and potential career opportunities see the [program website](https://www.lsc.edu/degrees/medical-laboratory-technician-aas/) (https://www.lsc.edu/degrees/medical-laboratory-technician-aas/) or contact the [professional advising team](mailto:advising@lsc.edu) (advising@lsc.edu) at 218-733-7601 or the Director of the Medical Laboratory Technician program.



MINNESOTA STATE

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