

**Medical Laboratory Technician**  
 Campus: Hibbing

**AAS Degree | 62 credits**

<b>FIRST YEAR</b>		<b>CREDITS</b>	<b>HOURS</b>	
<b>FALL SEMESTER</b>			<b>LEC</b>	<b>LAB</b>
ALHE 1620	Applied Medical Terminology	2	2	0
BIOL 2371	Human Anatomy and Physiology 1 (MnTC 3)	4	3	2
MLT 1412	Hematology 1	3	2	2
MLT 1423	Laboratory Techniques	4	3	2
PSYC 2225 **	Group Processes (MnTC 5 & 7)	3	3	0
<b>TOTAL SEMESTER CREDITS</b>		<b>16</b>		
<b>SPRING SEMESTER</b>				
BIOL 2372 *	Human Anatomy and Physiology 2 (MnTC 3)	4	3	2
MLT 1424	Medical Microbiology 1	4	2	4
MLT 1425	Clinical Chemistry 1	2	2	0
MLT 1432 *	Hematology 2	3	2	2
MLT 1445	Immunology	3	2	2
<b>TOTAL SEMESTER CREDITS</b>		<b>16</b>		
<b>SUMMER SEMESTER</b>				
COMM 1210	Introduction to Communications (MnTC 1)	3	3	0
# General Education Electives from Goal 1-6 of the MnTC		3		
<b>TOTAL SEMESTER CREDITS</b>		<b>6</b>		

<b>SECOND YEAR</b>				
<b>FALL SEMESTER</b>				
MLT 2424 *	Medical Microbiology 2	4	2	4
MLT 2435	Urinalysis and Body Fluids Analysis	2	1	2
MLT 2445 *	Clinical Chemistry 2	2	2	0
MLT 2466 *	Blood Bank	4	2	4
<b>TOTAL SEMESTER CREDITS</b>		<b>12</b>		
<b>SPRING SEMESTER</b>				
MLT 2510 ^	MLT Seminar	2	2	0
MLT 2590 ^	Clinical Practicum	10		
<b>TOTAL SEMESTER CREDITS</b>		<b>12</b>		

**PROGRAM DESCRIPTION**

Medical Laboratory Technology is a profession which combines the challenges and rewards of both medicine and science. A medical laboratory technician performs a wide range of laboratory tests including microscopic examination of blood, identification of bacteria and viruses and other laboratory testing that can lead to the diagnosis of diseases such as AIDS, diabetes, and cancer. Students learn the theory and principles behind the tests they perform and learn to correlate the results with patient's conditions. In addition, students earn general education credits, including anatomy and physiology and communications which leads to an Associate in Applied Science (A.A.S.) Degree.

**PROGRAM LEARNING OUTCOMES**

Upon graduation the medical laboratory technician will be able to demonstrate entry-level competencies in the following areas of professional practice:

1. Working collectively and collaboratively exhibiting skills in leadership, perseverance, and integrity.
2. Identifying, collecting, and processing patient specimens in accordance with current HIPAA laws and regulations.
3. Adhering to and practicing all clinical safety guidelines to include chemical, biological, and safety as it relates to patient laboratory testing.
4. Demonstrating identification and understanding of basic red cell and white cell development stages and morphologies and relating findings to hematologically normal as well as diseased states.

5. Demonstrating a basic understanding of urinalysis and body fluids in chemistries and microscopic findings relating to healthy and diseased states.
6. Demonstrating a basic understanding of microbiology, and mycology in identification methodologies and findings in normal as well as disease states.
7. Possessing foundational knowledge of blood banking to include blood typing, antibody identification, transfusion services, neonatal workups, component therapy, and administration.
8. Working concept of the bodies chemistries, systems, and markers including acid/base balance, proteins, enzymes, therapeutic drug monitoring, toxicology, and instrumentation.
9. Persevering in becoming life-long learners, exemplifying critical thinking skills and a desire for personal engagement in and out of the field.

### PROGRAM ACCREDITATION

The Medical Laboratory Technology Program is fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). [www.naacle.org](http://www.naacle.org)

### PROGRAM NOTES

- \* Course has a prerequisite
- ^ Taken after all other required MLT program courses have been completed with a grade of "C" or better
- \*\* Any Social/Behavioral science elective that meets MnTC Goal 5 can be taken/transferred (3-4 credits)
- # Check with advisor for acceptable college transfer credits
- A grade of "C" or better is required in all course work.
- [Differential tuition is assessed for all MLT courses.](#)

### EMPLOYMENT OPPORTUNITIES

The need for Medical Laboratory Technicians is growing faster than there are qualified people to fill these jobs. Currently, positions are open for qualified laboratory professionals at places such as hospitals, clinics, public health facilities, business, and industry.

The employment outlook promises to continue to be strong, as there is a shortage of Medical Laboratory Technicians nationwide. This program currently holds a three-year average placement rate of 100% for students completing the MLT program and finding employment in a related field or education continuation. The program shows a three-year average pass rate of 85% for students taking their ASCP Board of Certification exam within one year of graduation.

### PROGRAM FACULTY

Parendo, Laura J

[laura.parendo@minnesotanorth.edu](mailto:laura.parendo@minnesotanorth.edu)

218-293-6888

**MISSION:** Minnesota North College prepares lifelong learners and engaged citizens through inclusive, transformative experiences reflecting the character and natural environment of the region.

Minnesota North College is a member of Minnesota State and is an affirmative action, equal opportunity employer and educator. This document is available in alternate formats upon request by going to [MinnesotaNorth.edu](http://MinnesotaNorth.edu) to obtain the contact information of your home campus Accessibility Services Coordinator.