The Professional Master of Science in Medical Laboratory Sciences (MMLS) degree meets the needs of students who have earned a bachelor's degree (or higher) and are seeking the MLS professional credential for employment in hospital laboratories. The MMLS plan provides the necessary coursework for Board of Certification (BOC) eligibility, as well as additional graduate coursework in molecular diagnostics and laboratory operations management.

MMLS Prerequisite Course Requirements

Please consult our website at www.alliedhealth.umn.edu/mls to view course equivalences from other institutions

Science Prerequisites:

Biology
• BIOL 1009 General Biology
• PHSL 3051 Human Physiology

Mathematics
• MATH 1142 Short Calculus OR MATH 1271 Calculus

Statistics
• STAT 3011 Introduction to Statistical Analysis OR ESPY 3264 Basic and Applied Statistics

Chemistry
• CHEM 1061 and CHEM 1065 Chemistry Principals I with Lab
• CHEM 1062 and CHEM 1066 Chemistry Principals II with Lab
• CHEM 2301 Organic Chemistry I
• CHEM 2302 Organic Chemistry II

Foundation Science Prerequisites:

• VBS 2032 OR MICB 3301 Microbiology with Lab
• GCD 3022 OR BIOL 4003 Genetics
• BIOC 3021 Biochemistry
• MLSP 5511 Immunobiology OR MICB 4131 Immunology
• MLSP 5011W Professional Issues
• MLSP 5311 Laboratory Techniques

Register for a virtual Information Session!
Admissions Requirements

- GPA requirement: 3.0 (3.2 preferred)
- All science and foundation science prerequisite courses must be completed with a "C" or higher,* as well as all liberal education (LE) requirements, by the end of the spring semester of admissions year (two upper division writing courses will be completed during MLS program).

*S/N grades will be accepted for prerequisite courses taken between Spring 2020 - Spring 2021. A-F grades are preferred.

MMLS Curriculum

**Summer Semester**
- MLSP 5011W Professional Issues in the Healthcare Community
- MLSP 5311 Fundamental Biomedical Laboratory Techniques
- MLSP 5511 Immunobiology (if not completed prior to enrollment)

**Fall**
- MLSP 6111 Microbiology I Lecture
- MLSP 5112 Microbiology I Lab
- MLSP 6211 Hematology I Lecture
- MLSP 5212 Hematology I Lab
- MLSP 6313 Chemistry in Health & Disease
- MLSP 5012 Educational Methods and Interprofessional Practice
- MLSP 5013 Scholarly Inquiry and Analysis in MLS

**Spring**
- MLSP 6113 Microbiology II Lecture
- MLSP 6213 Hematology II Lecture
- MLSP 5214 Hematology II Lab
- MLSP 5312 Body Fluid Analysis
- MLSP 6513 Transfusion Medicine Lecture
- MLSP 5514 Transfusion Medicine Lab

**Clinical Experience**

**Summer or Fall**
- MLSP 5014W Lab Operations and Management
- MLSP 5701 Clinical Experience in Microbiology
- MLSP 5702 Clinical Experience in Hematology and Hemostasis
- MLSP 5703 Clinical Experience in Clinical Chemistry and Urinalysis
- MLSP 5704 Clinical Experience in Transfusion Medicine
- MLSP 6801 Advanced Practicum in MLS

**Fall or Spring**
- MLSP 6905 Research Methods and Capstone Project
- MLSP 6024 Advanced Laboratory Operations and Management
- MLSP 6401 Fundamentals of Molecular Diagnostics

Visit [www.alliedhealth.umn.edu/mls](http://www.alliedhealth.umn.edu/mls) to learn more about the Medical Laboratory Sciences program. For additional questions, please contact [cahpinfo@umn.edu](mailto:cahpinfo@umn.edu).