

BACHELOR OF SCIENCE IN HEALTH SCIENCES WITH A MAJOR IN MEDICAL LABORATORY SCIENCE

Online or hybrid online/on campus

Medical laboratory science combines medicine, basic sciences, and clinical sciences. Professionals in the field investigate and determine the causes of disease, using the latest biomedical instruments and molecular techniques to perform both routine and complex testing.

The bachelor of science in health sciences (BSHS) with a major in medical laboratory science (MLS) is a degree completion program offered in two formats: online or a hybrid of online and on-campus study. Both program formats also are offered as a second bachelor's degree.

BSHS in Medical Laboratory Science—Fully Online. (<http://smhs.gwu.edu/medical-laboratory-sciences/programs/bshs/fully-online/mlt/mlt-mls-bshs-medical-laboratory-science-fully-online>) The online BSHS in MLS is for students who have successfully completed a medical laboratory technician (MLT) program and currently are board certified MLTs.

BSHS in Medical Laboratory Science—Hybrid. (<http://smhs.gwu.edu/medical-laboratory-sciences/programs/bshs/curriculum>) The hybrid BSHS in MLS is for students who have completed 60 credits towards an associate's degree or who have earned an associate's degree along with the required prerequisite science and general education courses.

Second bachelor's degree program

The BSHS in MLS program is offered in both formats as a second bachelor's degree to students who already hold a baccalaureate degree from a regionally accredited college or university with the required prerequisite and general education coursework. For the online program, students also must have completed a medical laboratory technician (MLT) program and currently be board certified MLTs.

This program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) (<http://www.naacls.org>).

Visit the program website (<http://smhs.gwu.edu/medical-laboratory-sciences/programs/bshs>) for additional information.

REQUIREMENTS

The following requirements must be fulfilled: 120 credits, including a minimum of 60 credits in required courses completed at GW and up to 60 transfer credits in courses taken elsewhere. Eligible students admitted through approved SMHS Guaranteed Admission Agreements (<http://smhs.gwu.edu/academics/health-sciences-programs/guaranteed-admission->

agreements) partnerships must complete a minimum of 52 required credits at GW; eligibility is reviewed on a case-by-case basis.

Code	Title	Credits
Completion of the following prerequisite coursework from a regionally accredited college or university with a grade of C or above:		
3 credits of English composition		
8 credits of biology with lab ^{1,3}		
8 credits of general or inorganic chemistry with lab ^{1,3}		
4 credits of microbiology with lab ^{1,3}		
3 credits of organic chemistry or biochemistry ¹		
3 credits of college math (algebra, statistics, or higher)		
3 credits of humanities		
6 credits of social sciences		
A minimum of 22 credits in elective coursework. Elective coursework should include courses in pathophysiology or anatomy and physiology, ethics or values, and global/cross-cultural perspectives. ²		
Required for the major		
HSCI 2112W	Writing in the Health Sciences	
HSCI 4112W	Research and Writing in Health Sciences	
MLS 4116	Clinical Bacteriology I	
MLS 4117	Clinical Bacteriology II	
MLS 4119	Parasitology, Mycology, and Virology	
MLS 4130	Hematology I	
MLS 4131	Hematology II	
MLS 4141	Immunology and Serology	
MLS 4145	Clinical Biochemistry I	
MLS 4146	Clinical Biochemistry II	
MLS 4150	Immunoematology	
MLS 4151	Molecular Diagnostics	
MLS 4158	Laboratory Management and Operations	
MLS 4159	Capstone Seminar	

Additional requirements for the fully online BSHS program

MLS 3000 Clinical Laboratory Mathematics

MLS 3001 Professional Ethics for Medical Laboratory Scientists

MLS 4136 Clinical Experience I

MLS 4137 Clinical Experience II

MLS 4138 Clinical Experience III

MLS 4139 Clinical Experience IV

8 Credits of Electives selected with advisor approval

Additional requirements for the hybrid BSHS program

MLS 4160 Blood Bank Practicum

MLS 4161 Clinical Biochemistry Practicum

MLS 4162 Hematology Practicum

MLS 4164 Clinical Microbiology Practicum

MLS 4165 Urinalysis Practicum

MLS 4166 Coagulation Practicum

MLS 4216 Clinical Bacteriology Laboratory

MLS 4219 Parasitology, Mycology, and Virology Laboratory

MLS 4230 Hematology Laboratory

MLS 4246 Clinical Biochemistry Laboratory

MLS 4250 Immunohematology Laboratory

MLS 4251 Molecular Diagnostics Laboratory

¹ Medical laboratory technicians (MLTs) may receive transfer credit for biological sciences, general microbiology, general chemistry, and organic chemistry/biochemistry courses.

² Additional academic coursework. Non-traditional credit sources may be considered on a case-by-case basis (i.e. military coursework, credit-by-exam, and non-college based health programs).

³ Hands-on lab required. Online lab not acceptable.

SECOND BACHELOR'S

The BSHS in MLS program is offered as a second bachelor's degree to students who already hold a baccalaureate degree from a regionally accredited college or university with the required prerequisite and general education coursework.

The following requirements must be fulfilled: 120 credits, including a minimum of 60 credits in required courses completed at GW and up to 60 transfer credits in courses taken elsewhere.

Code	Title	Credits
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Completion of the following prerequisite coursework from a regionally accredited college or university with a grade of C or above:

3 credits of English composition

8 credits of biology with lab ^{1,3}

8 credits of general or inorganic chemistry with lab ^{1,3}

4 credits of microbiology with lab ^{1,3}

3 credits of organic chemistry or biochemistry ¹

3 credits of college math (algebra, statistics, or higher)

3 credits of humanities

6 credits of social sciences

A minimum of 22 credits in elective coursework. Elective coursework should include courses in pathophysiology or anatomy and physiology, ethics or values, and global/cross-cultural perspectives. ²

Required for the major

HSCI 2112W	Writing in the Health Sciences
HSCI 4112W	Research and Writing in Health Sciences
MLS 4116	Clinical Bacteriology I
MLS 4117	Clinical Bacteriology II
MLS 4119	Parasitology, Mycology, and Virology
MLS 4130	Hematology I
MLS 4131	Hematology II
MLS 4141	Immunology and Serology
MLS 4145	Clinical Biochemistry I
MLS 4146	Clinical Biochemistry II
MLS 4150	Immunohematology
MLS 4151	Molecular Diagnostics
MLS 4158	Laboratory Management and Operations
MLS 4159	Capstone Seminar

Additional requirements for the fully online BSHS program

MLS 3000 Clinical Laboratory Mathematics

MLS 3001 Professional Ethics for Medical Laboratory Scientists

MLS 4136 Clinical Experience I

MLS 4137 Clinical Experience II

MLS 4138 Clinical Experience III

MLS 4139 Clinical Experience IV

8 Credits of Electives selected with advisor approval

Additional requirements for the hybrid BSHS program

MLS 4160 Blood Bank Practicum

MLS 4161 Clinical Biochemistry Practicum

MLS 4162 Hematology Practicum

MLS 4164 Clinical Microbiology Practicum

MLS 4165 Urinalysis Practicum

MLS 4166 Coagulation Practicum

MLS 4216 Clinical Bacteriology Laboratory

MLS 4219 Parasitology, Mycology, and Virology Laboratory

MLS 4230 Hematology Laboratory

MLS 4246 Clinical Biochemistry Laboratory

MLS 4250 Immunohematology Laboratory

MLS 4251 Molecular Diagnostics Laboratory

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