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

Offered 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. 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. The hybrid BSHS in MLS is for students who have completed at least 45 college credits 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.

All BSHS in MLS programs are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) (http://www.naacls.org/).

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

ADMISSIONS

Admission Deadlines

Fall: July 15
Spring: November 15
Summer: March 15

Standardized test scores: SAT/ACT optional

Recommendation(s) required

One letter of recommendation from an academic instructor who can strongly attest to your academic ability, and/or an individual who served in a supervisory capacity for you, and who can strongly attest to your work ethic

Prior academic records

Transcripts are required from all colleges and universities attended (including via dual enrollment), whether or not credit was earned, the program was completed, or the credit appears as transfer credit on another transcript. Transcripts must be forwarded in their original sealed envelopes. Official transcript may also be sent electronically directly from the institution.

Applicants may receive credit for college-level coursework through International Baccalaureate (IB) or College Board Advanced Placement (AP) examinations. Official score results must be forwarded directly from the College Board.

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). Information on transfer credit eligibility may be found in the Bulletin under Regulations (see Transfer Credit/Advanced Standing for Undergraduates), including minimum letter grade requirements.

Statement of purpose

All applicants are required to submit a 250–500 word essay describing your reasons for undertaking study at the George Washington University. Focus on your academic objectives, career goals and related qualifications, including collegiate, professional, and extra-curricular activities relevant to your program of interest. Include any substantial accomplishments not already mentioned on the application form as well as obstacles you have overcome that influenced your desire to pursue this program of study.

Additional requirement

The program of study consists of a hybrid format offered at VSTC or a fully online format for applicants with MLT certification. Applicants with MLT certification are required to submit verification of national (ASCP, AMT, or AAB) MLT certification in order to be considered for the fully online format.
All students must meet Essential Functions requirements, and successfully meet the criminal background check and drug screen requirements. (https://smhs.gwu.edu/academics/health-sciences/academics/admissions/background-checks-and-drug-screenings)

A résumé or curriculum vitae is required.

A minimum cumulative AND science GPA of 2.5

The minimum acceptable grade is C for coursework to be applied toward an undergraduate degree (grades of C- and below do not transfer to GW SMHS programs)

Prerequisites
At least 45 semester hours of college with a minimum cumulative and science GPA of 2.5 from a regionally accredited institution of higher learning. Students applying under a Guaranteed Admission Agreement must have a cumulative GPA of 2.75. All should include the following coursework:

- English composition (3 credits)
- General Biology with lab (8 credits) Hands on lab required
- General or inorganic chemistry with lab (8 credits) - Hands on lab required
- Microbiology with lab (4 credits) Hands on lab required
- Organic chemistry or biochemistry (3 credits)
- College mathematics (college algebra, statistics or above–3 credits)

International applicants only

The hybrid and fully online options are not visa eligible. Permanent residents or those with a valid visa (e.g. work), if eligible, may apply to the hybrid program.

International students with an MLT certification may apply to the online program without needing a visa if they have an approved clinical site in their geographic region.

Official transcripts from institutions outside the U.S. must be accompanied by an official transcript evaluation from an accredited independent evaluating agency. Please be sure you request a detailed evaluation that includes all course titles, credit hours, grades, U.S. degree equivalency, grade-point averages (GPA), and date of degree conferral. For a list of acceptable foreign credential evaluation services, please click here (https://www.naces.org/members.php).

Applicants who are not U.S. citizens are required to submit official test scores for either Test of English as a Foreign Language (TOEFL) or Pearsons#Test of English (PTE) Academic or the academic International English Language Testing System (IELTS). The following are the minimum scores for admission consideration: TOEFL: 100 on the Internet-based exam, PTE: overall score of 68, or IELTS: an overall band score of 7.0, with no individual band score below 6.0

International applicants who meet the following conditions may be considered for admission without submitting TOEFL, PTE or IELTS or scores:
- They are a citizen of countries where English is the official language (as identified by GW ISO list of Exempt countries) OR;
- They hold at least a bachelor degree from a country where English is the official language as well as language of instruction OR;
- They hold at least a bachelor degree from an institution accredited by a U.S. regional accrediting agency.

Supporting Documents not Submitted Online should be Mailed to:
Office of Admissions
Health Sciences Programs
The George Washington University
2600 Virginia Avenue
Suite 104
Washington, DC 20037

Alternatively, official electronic transcripts can be sent to hsphora@gwu.edu

Contact for Questions:
hsphora@gwu.edu ~ 202-994-0384 (phone) ~ 202-994-0870 (fax)
9:00am - 5:00pm, Monday through Friday

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 may complete a minimum of 52 required credits at GW; eligibility is determined on a case-by-case basis.

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>3 credits in English composition</td>
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8 credits in biology with lab
8 credits in general or inorganic chemistry with lab
4 credits in microbiology with lab
3 credits in organic chemistry or biochemistry
3 credits in college math (algebra, statistics, or higher)
3 credits in humanities
6 credits in social sciences

Requirements for the major

- MLS 3001W: Professional Ethics for Medical Laboratory Scientists
- 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

And one course selected from the following:

- HSCI 2112W: Writing in the Health Sciences
- HSCI 4112W: Research and Writing in Health Sciences
- MLS 2007W: Microbes and Society

Additional major requirements for the fully-online BSHS program

- MLS 3000: Clinical Laboratory Mathematics
- MLS 4136: Clinical Experience I
- MLS 4137: Clinical Experience II
- MLS 4138: Clinical Experience III
- MLS 4139: Clinical Experience IV

Additional major 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 4167: Clinical Bacteriology Laboratory
- MLS 4168: Parasitology, Mycology, and Virology Laboratory
- MLS 4169: Hematology Laboratory
- MLS 4170: Clinical Biochemistry Laboratory
- MLS 4171: Immunohematology Laboratory
- MLS 4172: Molecular Diagnostics Laboratory

Additional school-specific requirements and electives

Depending on their prior academic record, students complete additional coursework to fulfill school-specific requirements in consultation with their academic advisor. Such courses, as well as appropriate elective selections, are taken from the following list. Alternative electives may be approved by the program director.

Clinical and laboratory sciences

- HSCI 2102: Pathophysiology
- HSCI 3501: Human Anatomy and Physiology I
- HSCI 3502: Human Anatomy and Physiology II
- MLS 2000: Biology for Health Sciences
- MLS 2001: Chemistry for Health Sciences
- MLS 4170: Introduction to Molecular Biology
- MLS 4171: Human Genetics
- MLS 4172: Molecular Techniques
- MLS 4242: Applications of Molecular Testing

Health data analytics

- HSCI 3117: Principles of Biostatistics for Health Sciences
- INFR 4101: Introduction to Medical Informatics
Medical laboratory technicians (MLTs) may receive transfer credit for biological sciences, general microbiology, general chemistry, and organic chemistry/biochemistry courses.

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

Alternative electives may be selected from any undergraduate CERT, HSCI, or MLS course or those approved by the program director. Advanced standing from eligible transfer credit may also be considered.

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.

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

2 Hands-on lab required. Online lab is not acceptable.

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Additional major requirements for the fully-online BSHS program

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<td>Clinical Bacteriology Laboratory</td>
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<td>MLS 4230</td>
<td>Hematology Laboratory</td>
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<td>MLS 4246</td>
<td>Clinical Biochemistry Laboratory</td>
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### INFR 4105 Consumer Health Informatics

### INFR 4110 Biomedical Data Science

### Topics in healthcare

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### COMBINED PROGRAM

- Dual Bachelor of Science in Health Sciences with a major in medical laboratory sciences and Master of Science in Health Sciences in the field of molecular diagnostic sciences (http://bulletin.gwu.edu/medicine-health-sciences/undergraduate-programs/dual-bshs-mls-mshs-mds/)