BACHELOR OF SCIENCE IN HEALTH SCIENCES WITH A MAJOR IN MEDICAL LABORATORY SCIENCE (STEM)

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 is a degree completion program offered in two formats: online or hybrid study.

- BSHS in medical laboratory science—Fully online. The online program is for students who have successfully completed a medical laboratory technician (MLT) program within six months of application and/or are currently board certified MLTs.
- BSHS in medical laboratory science—Hybrid. The hybrid program 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 with a major in medical laboratory science program is offered in both forms 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 (or completed an MLT program within six months of application).

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

This is a STEM designated program.

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

ADMISSIONS

Admission Deadlines
Fall: July 20
Spring: December 1
Summer: March 20

Standardized SAT/ACT optional test scores:

Recommendations 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.

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 requirements
The program of study consists of a hybrid format offered at VSTC or a fully online format for applicants with MLT certification, MLT work experience, or who have graduated within 6 months of an accredited MLT program. 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 resumé or curriculum vitae is required.

A minimum cumulative GPA of 2.70 and a 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).

Students who live outside of the Washington DC Metro Area are required to secure a satisfactory clinical site at the time of admission.

Successful completion of a criminal background check and a drug screen through Certiphi Screening, a third-party vendor, are required of all admitted clinical students in their first semester. Students are responsible for fees associated with these screens.

Prerequisites
At least 45 semester hours of college with a minimum cumulative GPA of 2.7 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 (6 credits)
- Biology (lecture and ‘hands-on’ lab) (8 credits)
- Microbiology (lecture and ‘hands-on’ lab) (4 credits)
- Chemistry (lecture and ‘hands-on’ lab) (8 credits)
- College Mathematics (algebra, statistics, or higher - 3 credits)
- Humanities (3 credits)*
- Social Sciences (6 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 Pearson’s Test of English (PTE), Academic the academic International English Language Testing System (IELTS) or the Duolingo English Test (DET). The following are the minimum scores for admission consideration:

- TOEFL: 250 computer-based or 100 Internet-based
- PTE: overall score of 68
- IELTS: an overall band score of 7.0, with no individual band score below 6.0
- DET overall score of 120

International applicants who meet the following conditions may be considered for admission without submitting TOEFL, PTE or IELTS or DET scores:

- They are a citizen of countries where English is the official language (as identified by GW ISO list of Exempt countries)
- 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:

George Washington University
ATTN: Transcript Processing Center
1415 W 22nd St.
Suite 220
Oak Brook, IL 60523

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

Contact for questions:
hsphora@gwu.edu
202-994-0384 (phone)
202-994-0870 (fax)
Hours: 9 am to 5 pm, 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 and through SMHS Guaranteed Admission Agreements partnerships.

All General Education coursework must be completed prior to enrollment in the program.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>General Education</td>
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</tr>
<tr>
<td></td>
<td>6 credits in English composition</td>
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</tbody>
</table>
3 credits in quantitative reasoning (college algebra, statistics, or higher)

4 credits in scientific reasoning (microbiology with lab)\(^1,2\)

3 credits in critical thinking in the humanities

6 credits in critical thinking in the social sciences

8 credits in general biology I and II\(^1,2\)

8 credits in chemistry I and II\(^1,2\)

7 credits in elective courses

**Required courses that may be transferred in or taken at GW**

3 credits in organic chemistry or biochemistry\(^1\)

**Core courses in the major, which must be taken at GW**

**Required for both fully online and hybrid options:**

<table>
<thead>
<tr>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>MLS 2007W</td>
<td>Microbes and Society</td>
</tr>
<tr>
<td>MLS 3001W</td>
<td>Professional Ethics for Medical Laboratory Scientists</td>
</tr>
<tr>
<td>MLS 4141</td>
<td>Immunology and Serology</td>
</tr>
<tr>
<td>MLS 4158</td>
<td>Laboratory Management and Operations</td>
</tr>
<tr>
<td>MLS 4145</td>
<td>Clinical Biochemistry I</td>
</tr>
<tr>
<td>MLS 4146</td>
<td>Clinical Biochemistry II</td>
</tr>
<tr>
<td>MLS 4150</td>
<td>Immunohematology</td>
</tr>
<tr>
<td>MLS 4151</td>
<td>Molecular Diagnostics</td>
</tr>
<tr>
<td>MLS 4130</td>
<td>Hematology I</td>
</tr>
<tr>
<td>MLS 4131</td>
<td>Hematology II</td>
</tr>
<tr>
<td>MLS 4116</td>
<td>Clinical Bacteriology I</td>
</tr>
<tr>
<td>MLS 4117</td>
<td>Clinical Bacteriology II</td>
</tr>
<tr>
<td>MLS 4119</td>
<td>Parasitology, Mycology, and Virology</td>
</tr>
<tr>
<td>MLS 4159</td>
<td>Capstone Seminar</td>
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</tbody>
</table>

**Required for the hybrid option only:**

<table>
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<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>MLS 4160</td>
<td>Blood Bank Practicum</td>
</tr>
<tr>
<td>MLS 4161</td>
<td>Clinical Biochemistry Practicum</td>
</tr>
<tr>
<td>MLS 4162</td>
<td>Hematology Practicum</td>
</tr>
<tr>
<td>MLS 4164</td>
<td>Clinical Microbiology Practicum</td>
</tr>
<tr>
<td>MLS 4165</td>
<td>Urinalysis Practicum</td>
</tr>
</tbody>
</table>

**Required for the fully online option only:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>MLS 4136</td>
<td>Clinical Experience I</td>
</tr>
<tr>
<td>MLS 4137</td>
<td>Clinical Experience II</td>
</tr>
<tr>
<td>MLS 4138</td>
<td>Clinical Experience III</td>
</tr>
</tbody>
</table>

**SECONDARY BACHELOR’S**

This is a degree completion program offered in fully online and hybrid online and on-campus formats\(^1\).

The following requirements must be fulfilled: 120 credits, at least 60 of which must be taken at GW.

**Code** | **Title** | **Credits**
--- | --- | ---
**General education and prerequisite courses**

3 credits in English composition

3 credits in critical thinking in the humanities

6 credits in critical thinking, quantitative reasoning, or scientific reasoning in the social sciences

8 credits in general biology with lab\(^2,3\)

8 credits in general chemistry with lab\(^2,3\)

3 credits in quantitative reasoning (algebra or statistics at the college level or above)
<table>
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<tr>
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<tbody>
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<td>MLS 2007W</td>
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<td>MLS 4130</td>
<td>Hematology I</td>
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<tr>
<td>MLS 4131</td>
<td>Hematology II</td>
</tr>
<tr>
<td>MLS 4116</td>
<td>Clinical Bacteriology I</td>
</tr>
<tr>
<td>MLS 4117</td>
<td>Clinical Bacteriology II</td>
</tr>
<tr>
<td>MLS 4119</td>
<td>Parasitology, Mycology, and Virology</td>
</tr>
<tr>
<td>MLS 4159</td>
<td>Capstone Seminar</td>
</tr>
</tbody>
</table>

For fully online option only:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLS 3000</td>
<td>Clinical Laboratory Mathematics</td>
</tr>
<tr>
<td>MLS 4136</td>
<td>Clinical Experience I</td>
</tr>
<tr>
<td>MLS 4137</td>
<td>Clinical Experience II</td>
</tr>
<tr>
<td>MLS 4138</td>
<td>Clinical Experience III</td>
</tr>
<tr>
<td>MLS 4139</td>
<td>Clinical Experience IV</td>
</tr>
</tbody>
</table>

11 credits in elective courses.

Required for the hybrid program option only:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>MLS 4246</td>
<td>Clinical Biochemistry Laboratory</td>
</tr>
<tr>
<td>MLS 4251</td>
<td>Molecular Diagnostics Laboratory</td>
</tr>
<tr>
<td>MLS 4230</td>
<td>Hematology Laboratory</td>
</tr>
</tbody>
</table>

Required and elective courses that can be transferred in or taken at GW

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLS 4219</td>
<td>Parasitology, Mycology, and Virology Laboratory</td>
</tr>
<tr>
<td>MLS 4216</td>
<td>Clinical Bacteriology Laboratory</td>
</tr>
<tr>
<td>MLS 4160</td>
<td>Blood Bank Practicum</td>
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<td>MLS 4161</td>
<td>Clinical Biochemistry Practicum</td>
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<td>Clinical Microbiology Practicum</td>
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<tr>
<td>MLS 4165</td>
<td>Urinalysis Practicum</td>
</tr>
<tr>
<td>MLS 4166</td>
<td>Coagulation Practicum</td>
</tr>
</tbody>
</table>

1 The fully online program option is for students who have successfully completed a medical laboratory technician (MLT) program within six months of application and/or are currently board certified MLTs. The hybrid option 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.

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

3 Hands-on lab required. An online lab is not acceptable.

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

**COMBINED PROGRAM**

**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/)

- Dual Secondary 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/secondary-bshs-medical-laboratory-science-molecular-diagnostic-sciences/)