

# MASTER OF SCIENCE IN HEALTH SCIENCES IN THE FIELD OF BIOMEDICAL LABORATORY SCIENCE

The master of science in health sciences in biomedical laboratory science provides high-quality education for health professionals through the use of a creative and innovative online format. The curriculum includes a combination of courses focused on leadership, research, current biotechnology, and ethics. The program prepares students with theoretical knowledge and practical skills for management or leadership positions within the clinical laboratory, research positions in public health microbiology laboratories, biotechnology companies, government agencies, blood banks, and research institutes.

Students may choose to include one of three concentrations in their program of study. The concentration in immunohematology and biotechnology has been designed to provide certified blood bankers a strong foundation in transfusion medicine as well as molecular biology and biotechnology. The concentration in medical laboratory science is geared toward MLS certified individuals who work as generalists or want an MLS-focused program of study. The concentration in translational microbiology is ideal for individuals working as clinical microbiologists who want a program of study with a microbiology focus.

Visit the program website (<https://smhs.gwu.edu/bulletin/smhs/mshs-biomedical-laboratory-science/>) for additional information.

## ADMISSIONS

Admission Fall - July 20

Deadlines:

Spring - December 1

Summer - March 20

Standardized Not required.

Test Scores:

Recommendations (2) recommendations.

required:

Prior Academic Records: Transcripts required from all colleges and universities attended, 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.

If academic records are in a language other than English, a certified English language translation must be provided in addition to the original transcripts; translations alone will not be accepted.

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. Please see the list of acceptable foreign credential evaluation services (<https://www.naces.org/members>).

Statement of Purpose: Please include a 250-500 word essay describing your reasons for undertaking study at the George Washington University, your academic objectives, career development plan, and related qualifications, including collegiate, professional, and community activities, relevant to your program of interest. Include any substantial accomplishments not already mentioned on the application form.

Degree and GPA Requirement: A bachelor's degree from a regionally accredited college or university, with a 3.0 GPA or above on a 4.0 scale.

Additional Requirements: National certification as a Medical Laboratory Technician (MLT), Medical Technologist (MT), Clinical Laboratory Scientist (CLS), a Medical Laboratory Scientist (MLS) or Blood Banking Technologist/ Specialist, or Microbiology Technologist/Specialist for medical laboratory science and immunohematology and biotechnology concentrations. No certification is required for the generalist or translational microbiology concentration.

International Applicants: The Health Sciences programs require the following minimum English language test scores for admission:

- Academic IETLS: an overall band score of 7.0 with no individual band score below 6.0; or
- TOEFL: 600 on paper-based or 100 on Internet-based, or
- Academic PTE: 68

### Supporting documents not submitted online should be mailed to:

George Washington University

ATTN: Transcript Processing Center  
1415 W 22<sup>nd</sup> St.  
Suite 220  
Oak Brook, IL 60523

Alternatively, official electronic transcripts can be sent to [transcripts@hsprograms.gwu.edu](mailto:transcripts@hsprograms.gwu.edu).

### Contact for questions:

[hsphora@gwu.edu](mailto: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: 36 credits, which may include either 15 credits in required courses and completion of a 21-credit concentration; or, for students who do not wish to pursue a concentration, 15 credits in required courses and 21 credits in graduate-level HSCI or MLS courses selected in consultation with the program director.

Code	Title	Credits
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### Required core courses

MLS 6244	Research Ethics and Integrity	
MLS 6245	Current Topics in Medical Laboratory Science	
MLS 6246	Capstone Project	
HSCI 6263	Biostatistics Translational Research	
MLS 6159	Leadership in Laboratory Medicine	

### Non-concentration and concentration options

Program without a concentration—21 credits in graduate-level HSCI or MLS elective courses approved by the program director.

Program with a concentration—21 credits in required and elective courses taken in one of the following concentrations:

Immunohematology and biotechnology concentration

Required

MLS 6219	Molecular Biology	
MLS 6213	Seminar in Immunohematology	
MLS 6141	Advanced Immunology and Serology	
MLS 6218	Genetics	
MLS 6217	Medical Biotechnology	

Electives

Electives 7 credits in graduate-level HSCI or MLS courses approved by the program director.

Medical laboratory science concentration

MLS 6242	Molecular Pathology	
MLS 6160	Data Analytics and Research Methods in Laboratory Medicine	
MLS 6243	Education and Assessment in MLS	
MLS 6132	Molecular Epidemiology	

MLS 6158	Advanced Laboratory Management and Operations	
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Electives

6 credits in graduate-level HSCI or MLS courses approved by the program director.

Translational microbiology concentration

Required

MLS 6141	Advanced Immunology and Serology	
MLS 6132	Molecular Epidemiology	
MLS 6216	Microbial Pathogenesis	
MLS 6160	Data Analytics and Research Methods in Laboratory Medicine	
MLS 6217	Medical Biotechnology	

Electives

6 credits in graduate-level HSCI or MLS courses approved by the program director.