

BACHELOR OF SCIENCE IN HEALTH SCIENCES WITH A MAJOR IN MEDICAL GENETICS AND MOLECULAR BIOLOGY

The Bachelor of Science in Health Sciences (BSHS) in Medical Genetics and Molecular Biology is a robust program for undergrads who recognize the impact and opportunity that molecular testing has in the future of health care solutions. Students who excel at science-based coursework and are passionate about the potential for molecular testing in medical science are a good fit for this program. This program provides theoretical knowledge and practical skills for positions in diagnostic clinical laboratories, public health laboratories, biotechnology companies, government and law enforcement agencies, and research institutes.

*The total number of credits and duration of the program depend on the number of transferred credits

Visit the program website (<https://healthsciencesprograms.gwu.edu/programs/bshs-medical-genetics-and-molecular-biology/>) for additional information.

ADMISSIONS

Application Deadline Fall: July 20

Spring: December 1

Summer: March 20

GW SMHS does not admit first-time college freshmen or provide general education courses; therefore, students are expected to enroll at another institution of higher education for at least one semester during an academic year following their high school graduation, and prior to transferring into GW.

Recommendation: One letter of recommendation (letter of recommendation is waived for GAA applicants)

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. #Please refer to GW Undergraduate Admissions (<https://undergraduate.admissions.gwu.edu/>) for information on maximum credits, minimum scores, and GW course equivalents for AP and IB credits.

Statement of purpose: Applicants must include a 250–500 word essay describing your reasons for undertaking study at GW, your academic objectives, career goals, 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.

Additional requirements: Resume/CV

Prospective online students must submit verification of MLT certification or proof of graduation from a NAACLS accredited MLT program within 6 months of their start term. Hybrid students will be required to come to the Foggy Bottom campus for labs.

Students residing beyond 25 miles outside of the Washington, DC metropolitan area and/or who wish to complete the clinical practicums in their area of residence must have identified an acceptable, accredited (i.e., TJC, CAP, etc.) clinical laboratory willing to provide the clinical instruction. A Clinical Site Verification (CSV) form must be filled out by the laboratory manager/director or the education coordinator of the facility and submitted to the appropriate program clinical coordinator for approval.

Minimum cumulative GPA of 2.7 and science GPA of 2.5. (For GAA applicants, a minimum cumulative GPA of 2.75 and science GPA of 2.5 are required)

Prerequisites: Applicants must have at least 45 credits from a regionally accredited college or university, which include the coursework specified below:

English Composition (composition I & II) - 6 Credits

College Mathematics (algebra, statistics, or higher) - 3 Credits

Humanities - 3 Credits

Social Sciences - 6 Credits

Biology (lecture and hands-on lab) - 8 Credits

Chemistry (lecture and hands-on lab) - 8 Credits

If you have an associate degree from a participating D.C., Maryland, Virginia community college, you may be eligible for guaranteed admission to this program. Review the list of participating institutions (<https://smhs.gwu.edu/academics/health-sciences/academics/guaranteed-admission-agreements> (<https://smhs.gwu.edu/academics/health-sciences/academics/guaranteed-admission-agreements/>)).

International Students: International students should check with individual programs regarding eligibility for visa sponsorship. Generally, online and hybrid programs are not eligible for student visa sponsorship from GW. This would include transfer students from any other institution with an existing visa.

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 the academic International English Language Testing System (IELTS) or the Duolingo English Test (DET). The following are the minimum scores for admission consideration:#TOEFL: 600 on paper based, 250 on 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, or DET overall score of 120. *Scores can be no older than 2 years.

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) 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:

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

Documents may be submitted electronically to: transcripts@hsprograms.gwu.edu.

Contact for questions:

hsphora@gwu.edu
 202-994-0384 (phone)
 Hours: 9:00 am to 5:00 pm, Monday through Friday

REQUIREMENTS

The following requirements must be fulfilled: 120 credits in required and elective courses; at least 60 of these credits must be taken at GW.

Code	Title	Credits
Required prerequisite courses		
6 credits of English composition		
8 credits in general biology with laboratory		
8 credits in general chemistry with lab		
3 credits in humanities		
3 credits in quantitative reasoning (college algebra, statistics, or higher)		
6 credits in in social sciences		
11 credits in elective courses		
Required and elective courses that can be transferred in or taken at GW		
3 credits in biotechnology (HSCI 1106 if taken at GW)		
3 credits in organic chemistry, clinical chemistry, or biochemistry (MLS 3003 if taken at GW)		
4 credits in microbiology w/lab (HSCI 3106 and HSCI 3108 if taken at GW)		
5 credits in elective courses		
Required courses and electives that must be taken at GW		
CERT 3005	Current Topics in Biomedical Sciences	
MLS 3000	Clinical Laboratory Mathematics	
MLS 3001W	Professional Ethics for Medical Laboratory Scientists	
MLS 4141	Immunology and Serology	
MLS 4151	Molecular Diagnostics	
MLS 4158	Laboratory Management and Operations	
MLS 4170	Introduction to Molecular Biology	
MLS 4171	Human Genetics	
MLS 4172	Molecular Diagnostics Capstone	
MLS 4217	Molecular Techniques	
MLS 4242	Applications of Molecular Testing	
MLS 4266	Molecular Diagnostics Practicum	
And one course selected from the following:		
MLS 2007W	Microbes and Society	

HSCI 2112W	Writing in the Health Sciences
HSCI 4112W	Research and Writing in Health Sciences

Additional required courses for the hybrid program option only.

MLS 4251	Molecular Diagnostics Laboratory
MLS 4252	Applications of Molecular Testing Laboratory

Electives for the hybrid and online program options

Students pursuing the hybrid program option take 15 credits in HSCI, MLS or CERT elective courses.

Students pursuing the fully online program option take 18 credits in HSCI, MLS or CERT elective courses.

Optional concentration

All students can choose to complete a concentration in either assisted reproductive technology or microbiology. Credits taken in the concentration count toward the elective requirement.

Assisted reproductive technology concentration:

CERT 3004	Endocrinology for Health Sciences
CERT 4010	Clinical Human Embryology
CERT 4012	Clinical Human Andrology
CERT 4014	Human Reproductive Cryobiology
MLS 4995	Independent Research in Biomedical Laboratory Science

Microbiology concentration:

MLS 2005	Plagues, Pandemics, and Epidemics
MLS 4116	Clinical Bacteriology I
MLS 4117	Clinical Bacteriology II
MLS 4119	Parasitology, Mycology, and Virology
MLS 4164	Clinical Microbiology Practicum
MLS 4216	Clinical Bacteriology Laboratory ((hybrid option only))
MLS 4219	Parasitology, Mycology, and Virology Laboratory ((Hybrid option only))
MLS 4995	Independent Research in Biomedical Laboratory Science