BACHELOR OF SCIENCE IN HEALTH SCIENCES WITH A MAJOR IN MOLECULAR DIAGNOSTIC SCIENCES

The bachelor of science in health sciences with a major in molecular diagnostic sciences is offered both in fully online and hybrid formats.The program provides students with the theoretical knowledge and practical skills needed for positions in diagnostic clinical molecular laboratories, public health laboratories, biotechnology companies, government agencies, law enforcement agencies, and research institutes. In addition, students who complete the program are eligible to take the Molecular Biology Board of Certification examination offered by the American Society for Clinical Pathology (ASCP).

Visit the program website (https://bls.smhs.gwu.edu/programs/bshs-molecular-diagnostic-sciences/) for more information.

ADMISSIONS

Admission Deadlines	Fall: July 15
	Spring: November 15
	Summer: March 15
Standardized test scores:	SAT/ACT optional
Recommendations required	One (1) 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. # 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.
	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 (https://smhs.gwu.edu/academics/health-sciences/academics/admissions/background-checks-and-drug-screenings/))
	A resumé or curriculum vitae is required.
	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

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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
General Education Requirement		
3 credits of English composition		
8 credits in biology (lecture and lab)		
4 credits in microbiology (lecture and lab)		
8 credits in chemistry (lecture and lab)		
3 credits in organic chemistry or biochemistry		
3 credits in college mathematics (algebra, statistics, or higher)		
3 credits in humanities		
6 credits in social sciences		
MLS 3001W	Professional Ethics for Medical Laboratory Scientists	
And one of the following courses:		
HSCI 2112W	Writing in the Health Sciences	
HSCI 4112W	Research and Writing in Health Sciences	
MLS 2007W	Microbes and Society	
Required for the major		
HSCI 1106	Introduction to Biotechnology for Health Sciences	
HSCI 3117	Principles of Biostatistics for Health Sciences	
HSCI 4106	Introduction to Epidemiology for Health Sciences	
MLS 3000	Clinical Laboratory Mathematics	
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
Additional requirements for the fully-online BSHS program	
9 credits in elective courses selected in consultation with the advisor.	
Additional requirements for the hybrid BSHS program	
MLS 4251	Molecular Diagnostics Laboratory
MLS 4252	Applications of Molecular Testing 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 3106	Microbiology for Health Sciences
HSCI 3108	Microbiology for Health Sciences Laboratory
HSCI 3501	Human Anatomy and Physiology I
HSCI 3502	Human Anatomy and Physiology II
MLS 3003	Biochemistry for Laboratory Science
MLS 4116	Clinical Bacteriology I
MLS 4117	Clinical Bacteriology II
MLS 4119	Parasitology, Mycology, and Virology
MLS 4164	Clinical Microbiology Practicum
Health data analytics	
INFR 4101	Introduction to Medical Informatics
INFR 4110	Biomedical Data Science
Topics in healthcare	
CERT 3005	Topics in Biomedical Science
COHM 4110	Strategic Communication for Healthcare Professionals
EHS 2109	Infectious Diseases and Bioterrorism
HSCI 2105	Current Issues in Bioethics
HSCI 3114	Management of Health Science Services
MLS 2005	Plagues, Pandemics, and Epidemics

*Advanced standing from eligible transfer credit may also be considered. Credit from non-traditional sources, i.e., other than from academic coursework, may be considered on a case-by-case basis; this may include military coursework, credit-by-exam, and non-college based health programs.

COMBINED PROGRAM

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