

POST-BACCALAUREATE CERTIFICATE IN MEDICAL GENETICS AND MOLECULAR BIOLOGY (STEM)

The post-baccalaureate certificate program in Medical Genetics and Molecular Biology includes coursework that will prepare individuals to pass the Technologist in Molecular Biology board of certification examination as well as for careers in: clinical laboratories, public health laboratories, research institutions, law enforcement agencies, molecular sections of hospital laboratories, reference laboratories, biotechnology firms, and pharmaceutical companies.

Upon successful completion of the program, students will be able to:

- Explain the methods of collection, transport, and handling of various specimen types for molecular analysis.
- Apply molecular-based testing for laboratory utilization and clinical decisions for patient/client outcomes
- Implement preventive and corrective maintenance programs for equipment and assays, as well as troubleshoot and evaluate appropriate actions for problem resolution.
- Apply knowledge of molecular and genetic theory and principles as they relate to human disease diagnosis.

This is a STEM designated program.

The program can be completed in as little as one year. Completion of the certificate program provides eligibility to sit for the ASCP Molecular Biology (MB) Exam.

Visit program (<https://healthsciencesprograms.gwu.edu/programs/post-baccalaureate-certificate-in-medical-genetics-and-molecular-biology-online/>) website.

ADMISSIONS

Application Fall: July 20

Deadline

Recommendations: One letter of recommendation required

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 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 Resume/CV
requirements

2.5 GPA or above on a 4.0 scale

Bachelor’s degree from an accredited college or university.

At the time of admission, students who live outside of the Washington, D.C. metro area are required to secure a clinical site which satisfactorily meets the requirements for a medical genetics and molecular biology clinical rotation.

All students must 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/>))

Since each state may have different requirements for licensure, each student is encouraged to contact their state’s regulating agency and review these requirements prior to beginning any degree program. State’s requiring licensure may require extended duration of practicum experiences, additional academic courses (outside the student’s program of study), etc. These additional requirements may require you to take a course or courses outside of GW.

In particular, New York and California have additional requirements for state licensure. Both NY and CA require extended times for practicum rotations. Please also be aware that the fully online post-baccalaureate certificate programs do not meet the student lab requirement for NY state licensure. Also, for those applying to the fully online post-baccalaureate categorical certificates in hematology, microbiology, blood banking, and chemistry, the state of New York does not provide licensure for categorical certification (e.g., Technologist in Microbiology, Technologist in Blood Banking, etc.). We recommend that students who live in New York or California or plan to relocate to New York or California do research to determine the NY and CA licensure requirements.

Prerequisites All required courses must be completed with a C grade (C- grades and lower do not transfer) or better at a regionally accredited institution of higher learning:

English Composition (3 credits)

College Algebra, Statistics, or higher (3 credits)

Biology (lecture and “hands-on” lab) (8 credits)

Microbiology (General or Clinical/Medicine – lecture and “hands-on” lab) (4 credits)

Chemistry (lecture and “hands-on” lab) (8 credits)

Organic Chemistry, Biochemistry, or Clinical Chemistry (3 credits)

International applicants: 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 includes transfer students from any other institution with an existing visa.

Applicants who have not completed a post-secondary degree from an institution where English is the sole language of instruction must submit TOEFL, IELTS, PTE Academic, or the Duolingo English Test scores to be considered for admission. The following are the minimum scores for admission consideration:

- Academic IELTS: An overall band score of 7.0, with no individual band score below 6.0.

- TOEFL: 600 paper-based or 100 internet-based.

- PTE: Overall score of 68

- DET: Overall score of 120

Undergraduate applicants who meet one of the following conditions can be considered for admission without submitting TOEFL, PTE or IELTS or DET scores:

- You have earned an associate's degree or higher from an institution where English is the sole language of instruction

- You are a citizen of an English-speaking country as defined on the SMHS International Applicant page (<https://smhs.gwu.edu/international-applicants> (<https://smhs.gwu.edu/international-applicants/>)).

Scores cannot be more than two years old. To ensure TOEFL scores are sent to GW, use institutional code 5246. An institutional code is not required to send IELTS or PTE scores to GW. DET scores must be submitted via the Duolingo English Test system directly to GW.

Based on their application and the results of the English proficiency examination students can be required to take English for Academic Purposes (EAP) during their first year of study at GW. GW evaluates each application holistically and applicants can be recommended for EAP even if they meet the requirements for exemption. Students placed in EAP courses should anticipate additional tuition expenses as well as possible extension of time needed to complete their degree programs.

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 can 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: 24 credits in required courses.

Code	Title	Credits
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	