

MASTER OF SCIENCE IN HEALTH SCIENCES IN THE FIELD OF BIOMEDICAL INFORMATICS (STEM)

The biomedical informatics program prepares professionals for a rewarding career in healthcare leadership and research. Graduates are skilled in the integration of programming, data analysis, and data manipulation skills to solve biomedical problems. Students apply data analytics to improve the quality of healthcare and patient outcomes. This interdisciplinary education includes components of clinical healthcare, computer science, data analytics, ethics, and translational medicine. The program's innovative curriculum includes courses in statistics, leadership, computer programming, and clinical care and the healthcare system. Students develop informatics analytics and tools in support of clinical decision making, clinical research, and patient engagement. Graduates are well-prepared for informatics careers at hospitals and medical centers, pharmaceutical companies, global healthcare organizations, consulting groups, and government agencies.

This is a STEM designated program.

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

ADMISSIONS

Admissions Fall - July 20

Deadlines:

Spring - December 1

The application and all supporting documentation (fees, statement of purpose, letters of recommendation, transcripts) must be received by the deadline in order for the application to be reviewed.

Standardized Test Scores:

Not required

Recommendations (2) letters of recommendation.

required: Recommendations should be from an academic instructor who can strongly attest to your academic ability and/or someone who has served in a supervisory capacity for you and can strongly attest to your work ethic. Recommendations from family and friends are not accepted.

Prior Academic Records: Official 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. Official transcripts must be forwarded in their original sealed envelopes or sent electronically directly from the institution.

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. For a list of acceptable foreign credential evaluation services, please follow this link: <https://www.naces.org/members> (<https://www.naces.org/members/>).

Statement of Purpose: In an essay of approximately 250-500 words, describe your interest in undertaking study at The George Washington University. What are some of your academic objectives or career goals? Please highlight any of your related qualifications and achievements-- including academic, community, professional, or extra-curricular activities relevant to your program of interest. Include any substantial accomplishments not already mentioned within the application.

Degree and GPA Requirement: Bachelor's degree from a regionally-accredited institution
Cumulative GPA of 3.0 or above on a 4.0 scale.

Additional Requirement: Resume required.

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: 30 credits in required courses and 6 credits in elective courses.

Code	Title	Credits
Required		
COHM 6430	Health Care Systems Operations	
HSCI 6263	Biostatistics Translational Research	
INFR 6101	Principles of Medical Informatics	
INFR 6121	High Performance Computing	
INFR 6104	Database Design for Biomedical Informatics	
INFR 6106	Data Structure and Algorithms for Biomedical Informatics	
INFR 6197	Biomedical Informatics Practicum	

INFR 6250	Data Mining and Visualization for Biomedical Informatics
INFR 6260	Machine Learning and Artificial Intelligence for Biomedical Informatics
INFR 6540	Medical Decision Making and Decision Support Systems
Elective	
6 credits in elective courses selected from the following with the advisor's approval:	
COHM 6320	Informatics for Operational Leadership and Healthcare Quality
HSCI 6264	Epidemiology Translational Research
HSCI 6273	Bioinformatics for Genomics
INFR 6103	Advanced Computing Applications for Biomedical Informatics
INFR 6105	Health Care Quality for Informatics
INFR 6198	Biomedical Informatics Capstone