## 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 wellprepared 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 Not required

**Test Scores:** 

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 In an essay of approximately 250-500 words, Purpose:

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 Bachelor's degree from a regionally-accredited

institution

Resume required.

Requirements

Cumulative GPA of 3.0 or above on a 4.0 scale.

Additional Requirements

Students:

International 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, gradepoint 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 22<sup>nd</sup> 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: 30 credits in required courses and 6 credits in elective courses.

Code	Title	Credits
Required		
HSCI 6223	Topics in Health Care Leadership	
HSCI 6240	Issues and Trends in the Health Care System	
HSCI 6263	Biostatistics Translational Research	
HSCI 6264	Epidemiology Translational Research	
INFR 6101	Principles of Medical Informatics	
INFR 6102	Principles of Medicine for Informaticians	
INFR 6105	Health Care Quality for Informatics	
INFR 6121	High Performance Computing	
INFR 6197	Biomedical Informatics Practicum *	
INFR 6540	Medical Decision Making and Decision Support Systems	
Elective		

6 credits in elective courses selected from the following with the advisor's approval:

CML 6275	Leadership and Change in Clinical Management
HSCI 6265	Grantsmanship in Translational Research
HSCI 6273	Bioinformatics for Genomics
INFR 6103	Advanced Computing Applications for Biomedical Informatics
INFR 6197	Biomedical Informatics Practicum
INFR 6198	Biomedical Informatics Capstone

<sup>\*</sup>Students may repeat INFR 6197 as an elective once other degree requirement have been met.