

Bioinformatics, MS

The Master of Science in Bioinformatics program (<https://bioinformatics.georgetown.edu/>) encompasses the most recent development and application of computational tools and techniques for the collection, analysis, management, and visualization of biological data, as well as modeling and simulation methods for the study of biological systems. It prepares students for careers in the fields of bioinformatics, molecular biology, computational biology, systems biology, medical informatics, and biotechnology.

The program includes hands-on computer labs, experience-building projects, and a bioinformatics internship. The 16-week internship provides opportunities to work with Georgetown's prestigious bioinformatics faculty or bioinformatics professionals in the leading bioinformatics, biomedical and biotechnology institutions in the Washington area.

- Modality: On Campus
- Academic Policies and Procedures: BGE Handbook (https://docs.google.com/document/d/1rkaOm8U_1eVwabvkl_HFvpfSWrMGnrc6Ex41erxP7g/edit?usp=sharing)
- Contact the Program (<https://bioinformatics.georgetown.edu/contact/>)

This program is offered through Biomedical Graduate Education (BGE) (<https://biomedicalprograms.georgetown.edu/>) at Georgetown University School of Medicine.

Requirements

Students must complete 30 credits of coursework, including 18 credits of required courses and 12 credits of electives.

Code	Title	Credits
Required Courses		
BINF 5210	Bioinformatics	4
BINF 5240	Bioinformatics Computing	5
BINF 5730	Bioinformatics Sem Series I	1
BINF 5860	Mol. Bio for Bioinf.	3
BINF 5740	Bioinformatics Sem Series II	1
BINF 5800	SYSTEMS BIOL/BIOINFORMATICS	3
BINF 7950	Bioinf. Internship Proposal	1
BINF 7951	BIOINFORMATICS INTERNSHIP ¹	0
Recommended Electives		12
BINF 5110	AI in Research and Work	
BINF 5115	Compt. and Algorithm. Thnking	
BINF 5130	Sci. Debating and Writing	
BINF 5220	Machine Learning	
BINF 5990	Next Gen Seq Data Analysis	
BINF 6300	Broad Aspects of AI in Biotech	
BINF 6970	Databases for Bioinformatics	
IMHS 6504	Intro to Exp Dsgn & Data Anlys	
PHSL 6504	Biostatistics	
SYM 5800	AI Applctn in Systems Medicine	
SYM 5910	Biomedical Informatics	

SYM 5940	Translational Bioinformatics
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Total Credits **30**

¹ Taken in the summer for two-semester students.