## MINOR IN BIOINFORMATICS

## **ADMISSIONS**

Information on the admission process is available on the Office of Undergraduate Admissions website (https://undergraduate.admissions.gwu.edu/). Applications may be submitted via the Common Application (https://go.gwu.edu/commonapp/).

Supporting documents not submitted online should be mailed to:

Office of Undergraduate Admissions The George Washington University 800 21st Street NW, Suite 100 Washington, DC 20052

Contact for questions: gwadm@gwu.edu or 202-994-6040

## **REQUIREMENTS**

Program Director: K. Crandall

The following requirements must be fulfilled: 18 credits, including 12 credits in required courses and 6 credits in elective courses.

Code	Title	Credits
Required		
PUBH 3201	Introduction to Bioinformatics	
PUBH 3202	Introduction to Genomics	
PUBH 4201	Practical Computing	
or CSCI 1012	Introduction to Programming with Pytho	n
or CSCI 1121	Introduction to C Programming	
or CSCI 1131	Introduction to Programming with C	
PUBH 4202	Bioinformatics Algorithms and Data Structures	
or CSCI 1112	Algorithms and Data Structures	
Electives		
6 credits in elective c	ourses selected from the following:	
ANTH 2406	Human Evolutionary Genetics	
BISC 2207	Genetics	
BISC 3209	Molecular Biology	
BME 2820	Biomedical Engineering Programming I	
BME 2825	Biomedical Engineering Programming II	

BME 3820	Engineering Analysis of Neural, Muscular, and Cardiovascular Physiology
CHEM 3165	Biochemistry I
CHEM 3166	Biochemistry II
CSCI 3212	Algorithms
CSCI 4364	Machine Learning
CSCI 4572	Computational Biology
EMSE 3760	Discrete Systems Simulation
EMSE 3850	Quantitative Models in Systems Engineering
EMSE 4765	Data Analysis for Engineers and Scientists
MATH 3359	Introduction to Mathematical Modeling
MATH 3553	Introduction to Numerical Analysis
MATH 3613	Introduction to Combinatorics
MATH 3730	Computability Theory
MATH 3740	Computational Complexity
PUBH 3131	Epidemiology
PUBH 3151	Current Issues in Bioethics
or PUBH 3151W	Current Issues in Bioethics
PUBH 4199	Independent Study
	High Performance and Cloud Computing
PUBH 6859	riight enormance and cloud computing
PUBH 8885	Computational Biology
PUBH 8885	Computational Biology  Intermediate Statistical Laboratory:
PUBH 8885 STAT 2183W	Computational Biology  Intermediate Statistical Laboratory: Statistical Computing Packages
PUBH 8885  STAT 2183W  STAT 3119	Computational Biology Intermediate Statistical Laboratory: Statistical Computing Packages Design and Analysis of Experiments
PUBH 8885  STAT 2183W  STAT 3119  STAT 3157	Computational Biology Intermediate Statistical Laboratory: Statistical Computing Packages Design and Analysis of Experiments Introduction to Mathematical Statistics I
PUBH 8885  STAT 2183W  STAT 3119  STAT 3157  STAT 3187	Computational Biology Intermediate Statistical Laboratory: Statistical Computing Packages  Design and Analysis of Experiments Introduction to Mathematical Statistics I Introduction to Sampling
PUBH 8885  STAT 2183W  STAT 3119  STAT 3157  STAT 3187  STAT 4188	Computational Biology Intermediate Statistical Laboratory: Statistical Computing Packages  Design and Analysis of Experiments Introduction to Mathematical Statistics I Introduction to Sampling  Nonparametric Statistics Inference  Mathematical Probability and Applications
PUBH 8885  STAT 2183W  STAT 3119  STAT 3157  STAT 3187  STAT 4188	Computational Biology Intermediate Statistical Laboratory: Statistical Computing Packages  Design and Analysis of Experiments Introduction to Mathematical Statistics I Introduction to Sampling  Nonparametric Statistics Inference  Mathematical Probability and Applications
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