

# MASTER OF SCIENCE IN BIOINFORMATICS

This is a three-semester, focused professional master's degree program combining 36 credit hours of courses in computer science, advanced molecular biology and biochemistry, statistics, and bioinformatics. A full-time summer internship in a corporate or academic bioinformatics group is an essential part of the curriculum. With input and assistance from corporate partners, the program is geared to training and placing graduates into lucrative jobs in the high-demand specialty field of bioinformatics. More information is available from the graduate coordinator of the M.S. Bioinformatics program.

Bioinformatics Website

Code	Title	Credit Hours
<b>Core Courses <sup>1</sup></b>		
BIOL 6150	Genomics and Applied Bioinformatics	3
BIOL 7200	Programming for Bioinformatics	3
BIOL 7210	Computational Genomics	3
CS 4400	Introduction to Database Systems	3
CX 4803	Special Topics in Computational Science and Engineering (Machine Learning in Computational Biology)	3
Statistics Requirement		3
BIOS 4401	Experimental Design and Statistical Methods in Biological Sciences	
MATH 3215 Introduction to Probability and Statistics		
Capstone		3
BIOL 8530	Human Evolutionary Genomics	
BIOL 8803	Special Topics (Applied Human Computational Genomics)	
BIOL 8902	Special Problems <sup>3</sup>	
CEE 6720	Environmental Microbial Genomics	
CSE 6242	Data and Visual Analytics	
<b>Bioinformatics Electives <sup>2</sup></b>		<b>15</b>
<b>Total Credit Hours</b>		<b>36</b>

<sup>1</sup> Substitution for any of the courses must be approved by program director

<sup>2</sup> Students may choose from a wide range of graduate courses in Biology, Biomedical Engineering, Computer Sciences, Computational Sciences and Engineering, Chemistry, Industrial and Systems Engineering, and Mathematics. For a full list of recommended electives, please see: <https://bioinformatics.gatech.edu/recommended-courses>.

<sup>3</sup> 3<sup>rd</sup> semester of research in same lab, totaling 9 or more credit hours