

# BIOINFORMATICS - MINOR

## Program Requirements

Code	Title	Semester Credit Hours
<b>Required Courses</b>		
	Introduction to Computation	4
	CSCE 110 Programming I or CSCE 110r Introduction to Computer Science Concepts and Programming	
	Bioinformatic Fundamentals	3
	BIOL 451 Bioinformatics	
	Computational Bioinformatics	3
	BIOL 350 Computational Genomics	
<b>Upper Level Biology</b>		
	Biological Molecules and Processes	3-4
	Select one of the following:	
	BIOL 213 Molecular Cell Biology	
	GENE 302 Principles of Genetics	
	GENE 320/ Biomedical Genetics	
	BIMS 320	
	Applied Bioinformatics	3-4
	Select one of the following:	
	BICH 419/ Computational Techniques for GENE 419 Evolutionary Analysis	
	BICH 464/ Bacteriophage Genomics GENE 464	
	BIOL 430 Biological Imaging	
	BIOL 450/ Genomics BICH 450	
	STAT 446 Statistical Bioinformatics	
	VTPP 438 Analysis of Genomic Signals	
<b>Total Semester Credit Hours</b>		<b>16</b>

Minimum of 16 hours required.

Minimum of 6 hours at the 300- to 400-level.

Must make a grade of C or better in all required Bioinformatics minor courses.

Students must complete at least one course in each of the five categories. If a course in statistics is not already required for a student's major, then STAT 211, STAT 301, STAT 302, or STAT 303 is strongly recommended. Independent research experiences through 491 courses is encouraged.