

Bachelor of Science - Bioinformatics - 120 Credits

		Fall Semester		Spring Semester		
Freshman	BNFO 135	Programming for Bioinformatics I	3	BNFO 236	Programming for Bioinformatics II (Spring Only)	3
	CHEM 125	General Chemistry I	3	CHEM 124	General Chemistry Lab	1
	HUM 101	English Composition: Writing, Speaking, Thinking I	3	CHEM 126	General Chemistry II	3
	MATH 111	Calculus I	4	MATH 112	Calculus II	4
	R120 101	General Biology	4	R120 102	General Biology II	4
	FRSH SEM	Freshman Seminar	0			
		Credits:		17	Credits:	15
Sophomore	BIOL 201	Foundations of Biology	3	CHEM 243	Organic Chemistry I	3
	BIOL 202	Foundations of Biology Lab	1	ECON 201	Economics	3
	CS 241	Foundations of Computer Science I	3	IS 350	Computers, Society and Ethics	3
	HUM 102	English Composition: Writing, Speaking, Thinking II	3	R120 356	Molecular Biology	3
	MATH 333	Probability & Statistics	3	YWCC 207	Computing & Effective Communication	1
	R120 352	Genetics	3			
		Credits:		16	Credits:	13
Junior	BNFO 330/601	Principles of Bioinformatics	3	BNFO 340/602	Data Analysis for Bioinformatics	3
	CS 331	Database System Design & Management	3	CS 435	Advanced Data Structures & Algorithm Design	3
	Lower Humanities GER	Any 200-level course from COM, ENG, HIST, HUM, LIT, PHIL, STS, or THTR	3	MATH 337	Linear Algebra	3
	PHYS 111	Physics I	3	YWCC 307	Professional Development in Computing	1
	PHYS 111A	Physics I Lab	1	Specialty Elective 1		3
	General Elective 1		3			
		Credits:		16	Credits:	13
Senior	BNFO 482/CS 634/CS 636	Databases and Data Mining in Bioinformatics/Data Mining/Data Analytics with R Program	3	BNFO 491/CS 491	Bioinformatics Senior Project/Computer Science Project	3
	ENG 340 or ENG 352	Oral Presentations or Technical Writing	3	Humanities Capstone	HSS 400-level	3
	Upper Humanities GER	Any 300-level course from COM, ENG, HIST, HUM, LIT, PHIL, STS, or THTR	3	Specialty Elective 4		3
	Specialty Elective 2		3	General Elective 2		3
	Specialty Elective 3		3	General Elective 3		3
		Credits:		15	Credits:	15