

Name:

Campus ID:

Minor in Bioinformatics and Computational Biology (BINF) - Requirements

37-38 credits

Last updated: 12/2025

Grade	Course	Name	Pre-requisites	Cr.
	Biology			8
	BIOL 140	Foundations of Biology: Ecology and Evolution	MATH 150 or higher or math placement	4
	BIOL 141	Foundations of Biology: Cells, Energy, & Organisms	MATH 150 or higher or math placement	4
	Statistics			4
	STAT 350	Stats with Applications in the Biological Sciences	MATH 150 or higher or math placement	4
	Computer Science			14
	CMSC 201	Computer Science I	MATH 150 or higher or math placement	4
	CMSC 202	Computer Science II	CMSC 201	4
	CMSC 203	Discrete Structures	MATH 140 or 151	3
	CMSC 341	Data Structures	CMSC 202 and 203	3
	BINF Core			8
	BIOL 415	Systems Biology	BIOL 303 and (CMSC 201 or MATH 152)	4
	BIOL 416	Bioinformatics	BIOL 303 and (CMSC 201 or MATH 152)	4
	Elective			3-4
		List A or B Elective	See catalog	3-4

Notes

- Required grades: all required courses and their prerequisites must be completed with a grade of C or better.
- Residency requirement: at least five courses must be completed at UMBC.
- BIOL 303 pre-requirement will be waived for BIOL 415 and 416.
- Allowed substitutions:
 - STAT 350 by STAT 355
 - Honors College (H) variants
- Electives:
 - List A Electives: BIOL and CHEM 4xx lecture courses of 3 or 4 credits approved by a BINF advisor (see catalog).
 - List B Electives: CMSC, IS, MATH, and STAT 4xx lecture courses of 3 or 4 credits approved by a BINF advisor (see catalog).