

Biomedical Engineering Degree Plan – Computational Biology

First year BME students take 12 credit hours in the fall and spring, and 6 credit hours in the summer. In subsequent years they are enrolled in 9 credit hours in fall and spring, and 6 credit hours in the summer. Typically, didactic course work is completed in the first two years, and in subsequent years students are enrolled for research, seminars or journal clubs totaling full-time enrollment equivalency. Advancement of the student to Ph.D. candidacy is dependent upon passing the qualifying examination (Exam I), which generally takes place in the second year. A typical degree plan for students with a research focus in Computational Biology is shown below. Additional Advanced Elective courses can be taken with permission from the student's research supervisor.

Year	Term	Half/ Full	Title	Credit Hour	Total Credit Hrs/Term
	Summer	1 st Week Aug	Biology for Non-Biologist Boot camp	2	Semester Total: 2
First Year	Fall	1 st Half	Core Curriculum - Genes	2	
			Core Curriculum - Proteins	2	
		2 nd Half	Core Curriculum - Cells	2	
			Mathematical Foundations of Quantitative Biology I	2	
		Full	Professionalism, Responsible Conduct of Research, and Ethics I	1	
		Full	Laboratory Rotations	3	Semester Total: 12
	Spring	1 st Half	Mathematical Foundations of Quantitative Biology II	2	
		2 nd Half	Quantitative Biology	1.5	
		Last two weeks	Software Engineering for Research Computing	3	
		Full	Professionalism, Responsible Conduct of Research, and Ethics II	1	
Full		Laboratory Rotations	4.5	Semester Total: 12	
Summer	1 st two weeks	Software Engineering for Research Computing	3	Semester Total: 6	
	Full	Research	3		
Second Year	Fall	Full	Current Topics in Computational Biology	1	
			Works in Progress in Biomedical Engineering	1	
			BME Exam 1 Preparation Course	1	
			Machine Learning	3	
			Research	3	Semester Total: 9
	Spring	Full	Current Topics in Computational Biology	1	
			Works in Progress in Biomedical Engineering	1	
			BME Exam 1 (Qualifying Exam)	1	
			Dissertation Research	6	Semester Total: 9
	Summer		Dissertation Research	6	Semester Total: 6
Third Year & Beyond	Fall	Full	Current Topics in Computational Biology	1	
			Works in Progress in Biomedical Engineering	1	
			Dissertation Research	7	Semester Total: 9
	Spring	Full	Current Topics in Computational Biology	1	
			Works in Progress in Biomedical Engineering	1	
			BME Exam II (Dissertation Proposal, Year 3)	1	
			Dissertation Research	6-7	Semester Total: 9
	Summer		Dissertation Research	6	Semester Total: 6
Minimum Credit Hours for PhD					102