

Computational Biology Degree Plan

First year DBS students take 12 credit hours in fall and spring, and 6 credit hours in the summer semesters. In subsequent years they are enrolled in 9 credit hours in fall and spring, and 6 credit hours in the summer. Typically, didactic coursework is completed in the first year, and in subsequent years students are enrolled in dissertation research and a combined work-in-progress seminar (WIP)/journal club totaling full-time enrollment equivalency. Advancement of the student to Ph.D. candidacy is dependent upon successful completion of all coursework and the qualifying examination, which takes place in the second year.

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	Biostatistical & Bioinformatics	2	
		Full	Laboratory Rotations	2.5	Semester Total: 12
	Summer	1 st two weeks	Software Engineering for Research Computing	3	Semester Total: 6
Full		Research	3		
Second Year	Fall	Full	Machine Learning	3	
			Current Topics in Computational Biology	1	
			Works in Progress	1	
			Research	4	Semester Total: 9
	Spring	Full	Current Topics in Computational Biology	1	
			Qualifying Exam	1	
			Works in Progress	1	
			Research	6	Semester Total: 9
	Summer		Research	6	Semester Total: 6
	Third Year & Beyond	Fall	Full	Current Topics in Computational Biology	1
Works in Progress				1	
Research				7	Semester Total: 9
Spring		Full	Current Topics in Computational Biology	1	
			Works in Progress	1	
			Research	7	Semester Total: 9
Summer			Research	6	Semester Total: 6
Minimum Credit Hours for PhD					