

Doctor of Philosophy Biostatistics Big Data Track Curriculum

Course Number	Course Title	Credits	Required or Elective	Semester Offered
PhD Biostatistics Core Courses: 31 credit hours		<i>ALL semester course offerings are subject to change</i>		
BE 7024	Computational Statistics	3	Required	Spring
BE 7088	Regression Analysis	3	Required	Spring
BE 7089	Experimental Design	3	Required	Fall
BE 8029	Biostatistics Seminar (4 semesters)	4	Required	Fall/Spring
ENV 7001	Environmental Health Seminar (4 semesters)	4	Required	Fall/Spring
GNTD 7003	Ethics in Research	1	Required	Spring
STAT 6021	Mathematical Statistics I	3	Required	Fall
STAT 6022	Mathematical Statistics II	3	Required	Spring
ENV 9091	Dissertation Research (<i>After Statement of Intent Approved</i>)	7	Required	Fall/Spring/Summer
Biomedical Credits: 4 credit hours Select a minimum of 4 credit hours from the list below			Required	
BE 7076	Introduction to Epidemiology	2		Fall/Spring
CB 8080	Cancer Biology & Therapeutics	4		Spring
GNTD 7001	Molecular and Cellular Biology	1-4		Fall
MCP 6031C	Computational Systems Biology	2		Spring
TOX 7082	Survey of Toxicology	2		Fall 2020
PhD Biostatistics Big Data Track Courses: 12 credit hours			Required	
BE 8093	Data Base Management	3	Required	Spring
BMIN 7099	Introduction to Bioinformatics	3	Required	Spring
GNTD 8001C	Introduction to Functional Genomics	3	Required	Fall
Select <u>one</u> course from the list below.				
BE 7082	Intro to Data Science	3		Fall (even years)
CS 6037	Machine Learning	3		Fall
Free Electives: Select remaining credits from Course Catalog List (fill-in with advisor)				
			Elective	
			Elective	
			Elective	
			Elective	
			Elective	
			Elective	
			Elective	
			Elective	
			Elective	
			Elective	
Total Credits Post-Masters (≥ 13 credit hours Free Electives)		60		
Total Credits Post-Bacc (≥ 43 credit hours Free Electives)		90		

- 3.0 GPA (B average) or higher required for graduation.
- All required courses must be completed with a B- or higher.
- "I" (Incomplete) or "NG" (Not Graded) grades must be removed from academic record prior to applying for graduation.
- The doctoral degree will be granted for no less than the equivalent of three years of full-time graduate study.
- All requirements for the doctoral degree must be completed within nine consecutive academic years of the date of matriculation into the program.
- Students must take a minimum of one graduate credit that contributes to degree requirements per academic year (fall-summer) to maintain active status.
- A doctoral student must be enrolled for at least 10 graduate credits in his/her program in each of two semesters (including summer semester) during a span of three consecutive semesters.
- Students are expected to meet with their advisor at least once a semester to discuss their academic progress.
- Electives must be determined with a consultation from your advisor.