BIOSTATISTICS (MS)

The Department of Statistics offers programs leading to a Professional Master of Science (M.S.) degree in Biostatistics (as well as Master of Science and Doctor of Philosophy (Ph.D.) degrees in Statistics, described elsewhere). The M.S. in Biostatistics requires 31 credits. Qualified fulltime students are expected to complete the program in three to four semesters. The program focuses on practical skills and rigorous training in modern areas of biostatistics to solve problems in public health, health services and policy, biomedical research, and other areas such as environmental health and ecology. Students completing this program successfully will acquire expertise in topics including statistical inference, regression analysis, design and analysis of clinical trials and epidemiological studies, bioinformatics, programming in SAS and R, data management, and consulting. Individuals with a Bachelor's degree in any major who have a background in mathematics and statistics are encouraged to apply.

Requirements

Course	Title	Credits
Required Courses		
BIST 5091	Biostatistics Internship	1
or BIST 5092	Biostatistics Practicum	
BIST 5215	Statistical Consulting	3
BIST 5225	Data Management and Programming in R and SAS	3
BIST 5505	Applied Statistics I	3
BIST 5605	Applied Statistics II	3
BIST 5545	Mathematical Statistics I	3
BIST 5645	Concepts and Analysis of Survival Data	3
BIST 5625	Introduction to Biostatistics	3
BIST 5635	Clinical Trials	3
Required Electives		
Select one of the following:		3
BIST 5615	Categorical Data Analysis	
BIST 5645	Concepts and Analysis of Survival Data	
BIST 5655	Epidemiology	
Select one of the following:		3
BIST 5515	Design of Experiments	
BIST 5615	Categorical Data Analysis	
BIST 5645	Concepts and Analysis of Survival Data	
BIST 5655	Epidemiology	
BIST 5705	Statistical Methods in Bioinformatics	
BIST 5815	Longitudinal Data Analysis	
Total Credits		**31**

The final requirement is passing the Master's Examination which is a written test on basic understanding of course materials. There is no thesis requirement.

Note: In order to be considered for a possible switch to the Ph.D. program or for financial support, a M.S. in Biostatistics student must first clear the Ph.D. Qualifying Examination.