Statistics (MSStat)

Graduate degree candidates are expected to develop broad competence in the discipline of Statistics as a whole as well as expertise in their chosen area of concentration. The Master of Science in Statistics, Applied Statistics is a two-year program that offers advanced training for students in classical and modern statistical methods. The program is designed for students preparing for careers in statistical professions, as well as those seeking additional statistical training while pursuing a doctoral degree in another discipline.

The Master of Science in Statistics, Mathematical Statistics focuses on training students in the theory and practice of modern statistical science and computation so that they are prepared to understand modern research and make novel contributions to the field. Major emphasis is placed on training in application-driven methodological research, probability modeling, and statistical computation. Throughout the program, students are exposed to central ideas in Bayesian methods, classical and modern statistical inference, and statistical machine learning.

Graduate Handbook

Graduate handbook information is updated and maintained by each program. Graduate handbooks are available within each program's office and online. Please contact the program with concerns or questions.

Admission

Prior to admission to the program, the student should demonstrate a background knowledge of mathematics and statistics equivalent to that acquired in upper-division courses in probability and statistics. Deficiencies may be made up by taking courses suggested by the graduate advisor. In most cases, these courses may not be counted toward the degree.

Total Hours Required: 30

Requirements

Concentration 1: Applied Statistics

The Master of Science in Statistics, Applied Statistics degree may be obtained with report or without report (coursework only). The report option also requires satisfactory completion of a written report and one associated three-hour report course taken on credit/no credit basis for a 33-hour total. Pursuit of the report option requires the student to find a willing supervising professor who is a member of the Graduate Studies Committee for the graduate program in Statistics.

Code	Title	Hours
Degree		
Core Courses (coursework with a grade of at least B)		**15**
Hours chosen from: Theoretical statistics (must be a two-course sequence)		
Hours chosen from: Statistical modeling		
Hours chosen from: Bayesian statistics		
Hours chosen from: Statistics courses		6
Hours chosen from: SDS course		3
Supporting coursework (may be in a subject area other than statistics but must be logically related and, together with the other degree coursework, constitute a coherent degree program)		6
Choose a sequence below:		0-3
Sequence 1: Without Report		
Sequence 2:		
SDS 398R	Master's Report	
Graduate Natural Sciences Requirements		
Graduate University Requirements		
Total Hours		**30-33**

Concentration 2: Mathematical Statistics

The Master of Science in Statistics, Mathematical Statistics degree requires at least 30 semester
hours of coursework, including 18 hours of required core coursework. The remaining 12 hours of
elective credit may be pursued either as supporting coursework in SDS or as related coursework
outside the department. These elective courses must be related to the student's program and
approved by the graduate advisor.

Code	Title	Hours
Degree		
Required Core Coursework		18
Elective Hours chosen from:		12
SDS Coursework		
Related Coursework from outside department		
Elective courses must be related to the student's program and approved by the graduate advisor		
Graduate Natural Sciences Requirements		
Graduate University Requirements		
Total Hours		**30**