

STATISTICS (MS)

The Department of Statistics offers programs leading to Master of Science (M.S.) in Statistics and Doctor of Philosophy (Ph.D.) degrees. (The Department also offers a Professional M.S. in Biostatistics). All programs include training in statistical application and theory, and give students sufficient flexibility to pursue their special interests as well as time to take courses in other departments at the University of Connecticut.

Location

- Storrs Campus

Modality

- In Person

Requirements

Master of Science

The M.S. in Statistics program normally requires 31 credits. While it is possible to complete the M.S. degree within a year, most students will need three to four semesters. The core courses of the program cover mathematical statistics, linear models, design of experiments, and applied statistics. The program also requires one to two courses in areas of application. The plan of study may be formulated with related work in almost any area, e.g., Biology, Economics, Nutrition, and Psychology. Students are encouraged to participate in statistical consulting projects done by members of the Department. To make acceptable progress through the program, three semesters of calculus and a semester of linear algebra in college are necessary. A background in statistics will be helpful, but is not assumed.

Master of Science Required Courses

Course	Title	Credits
STAT 5505	Applied Statistics I	3
STAT 5515	Design of Experiments	3
STAT 5545	Mathematical Statistics I	3
STAT 5555	Mathematical Statistics II	3
STAT 5605	Applied Statistics II	3
STAT 5725	Linear Models I	3
STAT 5091 or STAT 5094	Statistics Internship Seminar in Statistics	1-3
The elective courses normally should consist of four additional courses, two to three in statistics and one to two from other departments.		12

There is no final exam or thesis requirement in the M.S. in Statistics program.

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

Learning Objectives

1. Knowledge: Students must demonstrate appropriate breadth and depth of knowledge and comprehension of the major topics, theories, and issues in the field of Statistics by successfully completing all required courses.

2. Applied and computational skills: Students must demonstrate proficiency in applying statistical methods and techniques ethically and professionally to data analysis in real-world problems via internships. Students must also demonstrate proficiency in statistical computing to carry out data analysis.
3. Communication: Students must demonstrate proficiency in communicating to specialists or non-specialists in Statistics coherent arguments or explanations summarizing aspects of the field of Statistics.