

MS Mathematics with a Specialization in Applied Statistics

Specialization in Applied Statistics

This specialization is for students seeking development of skills in statistics and data analysis. Coursework can lead to employment in a variety of industries that seek quantitatively skilled employees with knowledge of statistical methodology.

Required Coursework

Students must meet the requirements of the MS degree in Mathematics. The specialization in Applied Statistics is earned by completing the following courses:

MTH 514 Linear Algebra and Functions of Several Variables

MTH 567 Applied Linear Models I

MTH 571 Statistical Methods for Genetic Data

MTH 668 Applied Linear Models II

MTH 675 Applied Multivariate Analysis

MTH 696 Exit Project in Mathematics

In addition to the above, the student would earn 12 elective credits by enrolling in three of the following:

MTH 521 Time Series Analysis

MTH 531 Categorical Data Analysis

MTH 525 Mathematical Methods in Science I

MTH 593 Special Topics (probable topics include Time Series Analysis, Bioinformatics, Quality Control, or Mathematical Biology)

MTH 537 Operations Research I

MTH 577 Numerical Methods

MTH 626 Mathematical Methods in Science II

MTH 638 Operations Research II

MTH 678 Numerical Methods II

or 4 approved credit hours from another academic area

Timeline

The following schedule of classes would allow students to complete the specialization in a 2-year period.

Fall Year 1 MTH 514 MTH 567	Spring Year 1 MTH 668 Elective
Fall Year 2 MTH 571 Elective	Spring Year2 MTH 675 Elective MTH 696 – Exit Project