

# MA in Statistics with Emphasis in Data Analytics

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## Prerequisites

Three semesters of calculus (or equivalent), one semester of linear algebra, and at least one post-calculus course in probability and statistics. At least one course in applied linear models is recommended.

## Degree Requirements

At least 30 hours of course work in the Department of Statistics; of these, at least 15 hours must be numbered 8000 or above.

### Required Courses

STAT 7110	Statistical Software and Data Analysis	3
STAT 8310	Data Analysis I	3
STAT 8320	Data Analysis II	3
STAT 8330	Data Analysis III	3
STAT 8640	Bayesian Analysis I	3
STAT 8710	Intermediate Mathematical Statistics I	3
STAT 8720	Intermediate Mathematical Statistics II	3

### Elective Courses

STAT 7580	Introduction to Statistical Methods for Customized Pricing	3
STAT 7830	Categorical Data Analysis	3
STAT 7870	Time Series Analysis	3
STAT 9250	Statistical Computation and Simulation	3
STAT 9530	Data Mining and Machine Learning Methods	3

## Original Written Work

All candidates must submit a written report on an independent effort toward producing original work related to data analytics. This report may, with the advisor's consent, take the form of a thesis, a written review on a set of papers in statistics, or a written report on an independent study project, which may include an original application of statistics. For this work, a student must register for at least three semester hours of STAT 8090.

## Presenting the Work

All candidates are required to present an open seminar on the results of the written report. The report should be made available for public review, through the Department of Statistics office, for at least one week before the examination.

## Examination

The MA examination covers material presented in the written report and the seminar and may also cover course work.