

# Master of Science in Computational and Quantitative Methods

## Core Courses and Internship

- MATH 5300 Regression Analysis
- MATH 5381 Advanced Statistical Methods
- MATH 5384 Advanced Machine Learning
- MATH 5395 Internship

## Emphasis: Predictive Analytics

### Required Courses:

- MATH 5383 Predictive Analytics
- MATH 5317 Probability Theory and Stochastic Processes
- MATH 5382 Time Series Analysis

### Recommended Electives

- MATH 5319 Design of Experiments
- MATH 5380 Statistical Inference
- CPSC 5340 Database Design
- COSC 5311 Data Mining

## Emphasis: Mathematical Finance

### Required Courses:

- MATH 5383 Predictive Analytics
- MATH 5317 Probability Theory and Stochastic Processes
- MATH 5382 Time Series Analysis

### Recommended Electives

- MATH 5315 Numerical Analysis
- FINC 5370 Derivatives & Risk Management
- ACCT 5315 Financial & Managerial Accounting Foundations
- CPSC 5340 Database Design