

# Statistics and Analytics Master of Science

## Statistics Concentration Course Requirements

### Required Core Areas (12-13 hours)

#### **Statistical Methods Core** (One of the following)

- STAT 5003/5001L Statistical Methods

#### **Regression Analysis Core** (One of the following)

- ◇ STAT 5313 Regression Analysis I
- ◇ INEG 5393 Applied Regression Analysis for Engineers
- ◇ ECON 6613 Econometrics I

#### **Multivariate Analysis Core** (One of the following)

- STAT 5353 Methods of Multivariate Analysis

#### **Experimental Design Core** (One of the following)

- ◇ STAT 5373 Experimental Design
- ◇ INEG 5333 Design of Industrial Experiments

### Required Track Courses (12 hours)

- STAT 5103 Introduction to Probability Theory
- STAT 5113 Statistical Inference
- STAT 5333 Analysis of Categorical Responses
- STAT 5443 Computational Statistics

### Electives (6 hours)

Electives are chosen by the student in consultation with the Statistics Track advisor. Electives may be any graduate course approved by the Statistics Concentration advisor. Suggested electives include:

- ◇ STAT 4033 Nonparametric Statistical Methods
- ◇ STAT 5343 Stochastic Processes
- ◇ STAT 5383 Time Series Analysis
- ◇ STAT 5413 Spatial Statistics
- ◇ STAT 610V Research in Statistics
- ◇ STAN 600V Master's Thesis (6 hours: 3 hours in each of Fall and Spring semester of final year)

In addition to the coursework above, a student must either successfully defend a thesis or pass a comprehensive examination (typically in spring semester of year two).