

# Statistics and Analytics Master of Science

## Statistics Concentration Course Requirements

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

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

- STAT 50133 Statistical Methods

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

- ◇ STAT 53133 Regression Analysis I
- ◇ INEG 53903 Applied Regression Analysis for Engineers
- ◇ ECON 66103 Econometrics I

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

- STAT 53533 Methods of Multivariate Analysis

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

- ◇ STAT 53733 Experimental Design
- ◇ INEG 53303 Design of Industrial Experiments

### Required Concentration Courses (12 hours)

- STAT 51033 Introduction to Probability Theory
- STAT 51133 Statistical Inference
- STAT 53333 Analysis of Categorical Responses
- STAT 54433 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 50303 Nonparametric Statistical Methods
- ◇ STAT 53833 Time Series Analysis
- ◇ STAT 54143 Spatial Statistics
- ◇ STAT 51231 Introduction to R
- ◇ STAT 6100V Research in Statistics
- ◇ STAN 6000V 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).