

# Statistics and Analytics Master of Science

## Computational Analytics Concentration Course Requirements

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

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

- ◇ STAT 50133 Statistical Methods
- ◇ ISYS 55003 Decision Support and Analytics

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

- ◇ INEG 53903 Applied Regression Analysis for Engineers
- ◇ STAT 53133 Regression Analysis I
- ◇ ISYS 56203 Multivariate Analysis

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

- ◇ STAT 53533 Methods of Multivariate Analysis
- ◇ ISYS 57203 Advanced Multivariate Analysis

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

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

### Required Concentration Courses (9 hours)

- CSCE 55203 Database Management Systems
- Two of the following
  - ◇ CSCE 50703 Data Mining
  - ◇ CSCE 50603 Machine Learning
  - ◇ CSCE 56103 Artificial Intelligence
  - ◇ CSCE 55603 Introduction to Deep Learning

### Electives (9 hours)

Electives are chosen by the student in consultation with the Computational Analytics Track advisor. Electives may be any graduate course approved by the Advisor; usually, at least two should be from the CSCE department and all should have a significant computational component.

### Comprehensive Examination

Typically, in the 4<sup>th</sup> semester a comprehensive examination is scheduled in consultation with the advising committee.