# **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 50003/50001L Statistical Methods
- ♦ ISYS 55003 Decision Support and Analytics

## Regression Analysis Core (One of the following)

- ♦ INEG 53903 Applied Regression Analysis for Engineers
- ♦ STAT 53103 Regression Analysis I
- ♦ ISYS 56203 Multivariate Analysis

## Multivariate Analysis Core (One of the following)

- ♦ STAT 53503 Methods of Multivariate Analysis
- ♦ ISYS 57203 Advanced Multivariate Analysis

## Experimental Design Core (One of the following)

- ♦ INEG 53303 Design of Industrial Experiments
- ♦ STAT 53703 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

### **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  $4^{th}$  semester a comprehensive examination is scheduled in consultation with the advising committee.