



**Concentration Electives:**

Complete 12 credits either from one chosen concentration, or complete 12 credits from any of the concentrations

**Computational and Big Data Analytics**

- CAI 4203 Introduction to Deep Learning
- CAP 4770 Introduction to Data Mining
- CEN 4083 Introduction to Cloud Computing
- COP 4534 Algorithm Techniques
- COP 4703 Information Storage and Retrieval Concepts
- COT 4431 Applied Parallel Computing

**Artificial Intelligence and Robotics**

- CAI 4203 Introduction to Deep Learning
- CAP 4453 Introduction to Robot Vision
- CAP 4506 Introduction to Game Theory
- CAP 4641 Natural Language Processing
- CAP 4770 Introduction to Data Mining
- CDA 4625 Introduction to Mobile Robotics

**Statistical Modeling**

- CAP 4770 Introduction to Data Mining
- CAP 4830 Fundamentals of Modeling & Simulations
- MAD 3301 Graph Theory
- MAD 3401 Numerical Analysis
- STA 3164 Statistical Methods II (Prereq: STA 3163)
- STA 4234 Introduction to Regression Analysis

All courses are 3 credits except as noted.

**Concentration Elective Courses**  
 The list of electives will be updated with acceptable elective courses from computing, math and stat programs.

**% STA2023**  
 Prerequisite is High school algebra.

**\* COT3100:**  
 Prereq: MAC XXXX (any MAC course)  
 Coreq: (COP2047 or COP2210 or COP2250 or EEL2280)

**^ ENC3213/ ENC3249**  
 prerequisite: complete the UCC English requirements