



A line indicates a prerequisite. The course above must be completed before the course below can be taken.

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

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

† **BSC2010 & BSC2010L:**
 OR any Group 1 or Group 2 Natural Science course with Lab.

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

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

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