### MAJOR REQUIREMENTS – CSC Option 2 – GIS (76 hours)

**Core Courses:** (55 hours)

- **CSC 131** Introduction to Computer Science (4) Prerequisite: MAT 111 or 115
- **CSC 133** Discrete Mathematical Structures (3) Prerequisite: MAT 111 or 115, or equivalent
- **CSC 231** Introduction to Data Structures (4) Prerequisite: CSC 131 with a grade of “C” or better, Corequisite: CSC 133
- **CSC 242** Computer Organization (3) Prerequisites: CSC 131 with a grade of “C” or better and 133
- **CSC 331** Object-Oriented Programming and Design (3) Prerequisite: CSC 231 with a grade of “C” or better
- **CSC 344** Computer Networks (3) Prerequisite: CSC 231 with a grade of “C” or better and CSC 242
- **CSC 360** Formal Languages and Computability (3) Prerequisites: CSC 231 with a grade of “C” or better and 242
- **CSC 380** Design and Analysis of Algorithms (3) Prerequisites: CSC 133, 231 with a grade of “C” or better, and MAT 161
- **CSC 385** Professional and Ethical Issues in Computer Science (3) Prerequisites: ENG 101 or equivalent and junior/senior standing in computer science or information technology (Meets Oral Communication Requirement)
- **CSC 434** Programming Languages (3) Prerequisites: CSC 331 with a grade of “C” or better and 360
- **CSC 450** Software Engineering (3) Prerequisites: CSC 331 with a grade of “C” or better and senior standing (Meets Applied Learning Requirement)
- **CSC 455** Database Design and Implementation (3) Prerequisite: CSC 331 with a grade of “C” or better (Meets Applied Learning Requirement)
- **MAT 161** Calculus with Analytical Geometry I (4) Prerequisite: MAT 112 or 115 or equivalent preparation
- **MAT 162** Calculus with Analytical Geometry II (4) Prerequisite: MAT 161
- **BAN 280** Statistical Analysis for Business and Economics (3) Prerequisite: MAT 111
- **STT 215** Introduction to Statistics (3) Prereq: Satisfactory performance on the UNCW math test or MAT 105

**GIS Concentration:** (21 hours) Complete requirements for Geospatial Technologies Minor

- **GGY 215** The Digital Globe (3)
- **GGY 220** Cartography (3) Prerequisite: GGY 130 or GGY 140
- **GGY 281** Introduction to Geographic Information Systems (3) Prereq: GGY 130 or 140 or EVS 195 or consent of instructor
- **GGY 322** Introduction to Remote Sensing (3) Prereq: GGY 130 or GLY 120 or GGY 215
- **Choose 12 additional hours of electives, 6 credit hours at 300-level or above selected from the following:**
  - **GGY 333, 424, 426, 428, 433, GLY 390, 470, 471, MIS 315, OCN 390 or 471.**

**Note:** At least 9 hours must come from courses outside of the student’s major.

A grade point average of “C” (2.00) or better computed over the CSC courses and all the courses used to fulfill the requirements of the major are required.

*These courses require a lab
+May also be used to satisfy University Studies Foundations & Approaches and Perspectives requirements

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**Requirements to declare CSC:** Completion of 24 hours

For further information, see the CSC website: [http://www.uncw.edu/csc](http://www.uncw.edu/csc) and [http://catalogue.uncw.edu](http://catalogue.uncw.edu).

This document is considered an unofficial guide. Please refer to your degree audit for the latest updates.

4/20/2018