

B. S. Computer Science (CSC)*College: Arts & Sciences*

Option 2: Neuroscience Concentration

Course requirements for all UNCW degrees include: (1) [University Studies](#), (2) specific major requirements, and (3) sufficient elective hours for a combined total of a minimum of 124 hours.

MAJOR REQUIREMENTS – CSC Option 2 – Neuroscience (Minimum 73 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, Corequisite: CSC 133
- _____ CSC 242 Computer Organization (3) Prerequisites: CSC 131 and 133
- _____ CSC 331 Object-Oriented Programming and Design (3) Prerequisite: CSC 231
- _____ CSC 344 Computer Networks (3) Prerequisite: CSC 242 and CSC 231
- _____ CSC 360 Formal Languages and Computability (3) Prerequisites: CSC 231 and 242
- _____ CSC 380 Design and Analysis of Algorithms (3) Prerequisites: CSC 133, 231, 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 and 360
- _____ CSC 450 Software Engineering (3) Prerequisites: CSC 331 and senior standing (Meets **Applied Learning Requirement**)
- _____ CSC 455 Database Design and Implementation (3) Corequisite: CSC 331
- _____ +*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
- _____ +QMM 280 Statistical Analysis for Business and Economics (3) Prerequisite: MAT 111
- or _____ +STT 215 Introduction to Statistics (3) Prereq: Satisfactory performance on the UNCW math test or MAT 105
- _____ CSC _____ Choose 6 additional hours in CSC at the 300-400 level; must be approved by advisor.
- _____ CSC _____

Neuroscience Concentration: (23 hours)

- _____ BIO 201 Principles of Biology: Cells (0-4)
- _____ PSY 105 General Psychology (3)
- _____ PSY 256 Brain and Behavior (3)
- _____ BIO 443 Neurobiology (3) Pre-requisite: BIO 240 and VIO 241 or BIO 345
- or _____ PSY 456 Advanced Biological Psychology (3) Pre-requisite: PSY 256 and BIO 105 or BIO 201 or consent of instructor
- _____ BIO 495 Seminar (1-3) Pre-Reqs: BIO 201, 202, 335, 366, and a physiology course or consent of instructor
- or _____ PSY 495 Topical Seminar (1-3) Pre-Requisite: PSY 105
- _____ PSY _____
- _____ BIO _____ Choose 3 credit hours of neuroscience research (PSY 491 or 499 or BIO 491 or 499)
- _____ _____ Choose at least 6 hours of the following: BIO 240, 335, 443, CHM 101, 102, CSC 415, PAR 320, PSY 245, 356, 456, 457
- _____ _____

**These courses require a lab*

+May also be used to satisfy University Studies Foundations & Approaches and Perspectives requirements

Requirements to declare CSC: Completion of 24 hours

For further information, see the CSC website: <http://www.uncw.edu/csc> and <http://catalogue.uncw.edu>.