

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 120 hours.

MAJOR REQUIREMENTS – CSC Option 2 – Neuroscience (Minimum 78 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
 _____ 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) Prerequisite: BIO 105 and PSY 105 or higher
 _____ BIO 443 Neurobiology (3) Prerequisite: BIO 240, BIO 345, or PSY 256
 _____ or PSY 456 Advanced Biological Psychology (3) Prerequisite: PSY 256 and BIO 105 or BIO 201 or consent of instructor
 _____ BIO 495 Seminar (1-3) Prerequisite: Senior standing
 _____ or PSY 495 Topical Seminar (1-3) Prerequisite: PSY 105
 _____ **Choose at least 9 hours of the following with at least 3 hours at 400 level or higher, and at least 9 hours outside the major: BIO 240, 335, 368, 415, 440, 443, 459, 484, 491, 499, CHM 101, 102, CSC 415, PAR 320, PSY 245, 356, 456, 457, 491 or 499.

**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>