

B.S. Computer Science (CSC)

(Option 2 - Applied)

*College: Arts & Sciences***DEGREE REQUIREMENTS**

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

(1) BASIC STUDIES (45 semester hours)

See Basic Studies sheet and/or information on the WEB at <http://www.uncw.edu/uc/basicstudies.htm>

(2) MAJOR REQUIREMENTS – CSC Option 2 – Applied (Minimum 72 hrs)

Check when complete:

- _____ CSC 100 Orientation to Computer Science (1)
- _____ +CSC 121 Introduction to Computer Science (3) Prerequisite: MAT 111 or 115 [note: students w/no programming experience should complete CSC 112 prior to CSC 121]
(Meets **Computer Competency Requirement**)
- _____ CSC 133 Discrete Structures (4) Prerequisite: MAT 111 or 115; corequisite: CSC 121
- _____ CSC 221 Introduction to Computer Science II (4) Prerequisite: CSC 121
- _____ CSC 242 Digital Logic, Computer Organization and Assembly Language (4) Prerequisites: CSC 121 and 133
- _____ CSC 332 Data Structures (3) Prerequisite: CSC 221; prerequisite or corequisite MAT 161
- _____ CSC 344 Computer Networks (3) Prerequisite: CSC 242
- _____ CSC 360 Formal Languages and Computability I (3) Prerequisite: CSC 242 and CSC 332
- _____ CSC 434 Programming Languages (3) Prerequisite: CSC 332 and CSC 360
- _____ CSC 450 Software Engineering (3) Prerequisite: CSC 332 and senior standing
- _____ CSC 455 Data Base Management Systems (3) Corerequisite: CSC 332
- _____ +MAT 161 Calculus with Analytical Geometry (4) Prerequisite: MAT 112 or 115 or equivalent preparation in algebra and trigonometry
- _____ +MAT 162 Calculus with Analytical Geometry (4) Prerequisite: MAT 161
- _____ *ACG 201 Financial Accounting (3) ACGL 201. Lab (1) Prerequisite or corequisite: MAT 111
- _____ ACG 203 Managerial Accounting (3) Prerequisite: ACG 201 and ACGL 201
- _____ +ECN 221 Principles of Economics – Micro (3) Prerequisite: MAT 111
- _____ +ECN 222 Principles of Economics – Macro (3) Prerequisite: ECN 221
- _____ FIN 335 Principles of Financial Management (3) Prerequisites ACG 203, ECN 222, and QMM 280
- _____ MGT 350 Organization Theory and Behavior (3) Prerequisite: Junior standing
- _____ MKT 340 Principles of Marketing (3) Prerequisite: Junior standing
- _____ QMM 280 **or** Statistical Analysis for Business and Economics (3) Prerequisite: MAT 111 or 115
- _____ +STT 215 Introduction to Statistics (3) Prerequisite: MAT 111 or 115
- _____ CSC _____ 300 or 400 level CSC course approved by the advisor
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- _____ CSC 495 Seminar in Computer Science (1) Prerequisite: Junior or senior standing and consent of instructor (or any other approved oral intensive course – see UNCW catalogue)
(Meets **Oral Communication Competency Requirement**)

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 Basic Studies requirements

(3) ELECTIVES

_____ Elective hours to equal a minimum of 124 hours

Requirements to declare PRE-CSC: Completion of 24 hours

Requirements to declare CSC: CSC 100, CSC 121, 133, and 221 with a GPA of at least 2.5 on these three courses.

For further information see the CSC WEB sites: <http://www.uncw.edu/csc> and <http://www.uncw.edu/catalogue/documents/catalogue.pdf#page=245>

COMPUTER SCIENCE COURSES

- CSC 100.** Orientation to Computer Science (1)
CSC 105. Introduction to Computing and Computer Applications (3)
CSC 110. Fluency in Information Technology (3)
CSC 112. Introduction to Computer Programming (3) Prerequisite: MAT 111 or 115
CSC 121. Introduction to Computer Science I (3) Prerequisite: MAT 111 or 115
CSC 133. Discrete Structures (4) Prerequisite: MAT 111 or 115
CSC 204. Multimedia Systems (3) Prerequisite: CSC 105 or 110 or equivalent
CSC 220. (ART 220) (FST 220) 3-D Computer Graphics Tools and Literacy (3) Prerequisite: CSC 105, 121 or permission of instructor
CSC 221. Introduction to Computer Science II (4) Prerequisite: CSC 121
CSC 242. Digital Logic, Computer Organization and Assembly Language (4) Prerequisite: CSC 121 and CSC 133
CSC 255. Database Management With Internet Applications (3)
CSC 275. Topics in Computer Science and Technology (3) Prerequisite: Permission of instructor
CSC 320. (ART 320) (FST 320) Computer Animation (3) Prerequisite: CSC 220 (ART 220) (FST 220) or permission of instructor
CSC 325. (MAT 325) Numerical Algorithms (3) Prerequisite: CSC 112 or 121, MAT 162
CSC 332. Data Structures (3) Prerequisite: CSC 221; prerequisite or corequisite MAT 161
CSC 337. Parallel Computing (3) Prerequisite: CSC 242 and 332
CSC 340. Scientific Computing (3) Prerequisites: MAT 162 and CSC 221
CSC 342. Operating Systems (3) Prerequisite: CSC 242 and CSC 332
CSC 344. Computer Networks (3) Prerequisite: CSC 242
CSC 360. Formal Languages and Computability I (3) Prerequisite: CSC 242 and CSC 332
CSC 370. Computer Graphics (3) Prerequisite: CSC 332 and MAT 162
CSC 385. Professional and Ethical Issues in Computer Science (1) Prerequisite: Junior or senior standing in CSC
CSC 415. (515) Artificial Intelligence (3) Prerequisite: CSC 332
CSC 421. Computer Gaming (3) Prerequisite: CSC 320 (ART 320) (FST 320), 340, and 370.
CSC 422. Performance Evaluation of Computer Systems (3) Prerequisite: STT 215, MAT 162, and CSC 221
CSC 425. (525; MAT 425/525) Numerical Analysis (3) Prerequisite: MAT 325, 335, and 361
CSC 434. Programming Languages (3) Prerequisite: CSC 332 and CSC 360
CSC 442. Computer System Architecture (3) Prerequisite: CSC 242
CSC 444. Network Programming (3) Prerequisite: CSC 342 and CSC 344
CSC 450. Software Engineering (3) Prerequisite: CSC 332 and senior standing
CSC 453. Object-Oriented Analysis and Design (3) Prerequisite: CSC 332 and senior standing
CSC 455. Data Base Management Systems (3) Corequisite: CSC 332
CSC 457. Compiler Construction (3) Prerequisite: CSC 434 and senior standing
CSC 460. Formal Languages and Computability II (3) Prerequisite: CSC 360
CSC 475. Topics in Computer Science (3) Prerequisite: Senior standing and permission of instructor
CSC 491. Directed Individual Study (1-3) Prerequisite: Overall GPA of at least 2.00, junior or senior standing, and consent of instructor, department chair and dean
CSC 495. Seminar in Computer Science (1) Prerequisite: Junior or senior standing and consent of instructor
CSC 498. Internship in Computer Science (1-3) Prerequisite: Overall GPA of at least 2.50 and a GPA in CSC of at least a 2.80
CSC 499. Honors Work in Computer Science (2-3) Prerequisite: Eligibility for honors program