

# Bachelor of Science in Computer Science Software Development Checklist

Required Course	When Taken	Grade	Notes
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## Computer Science Core (33 Credit hours)

CSIT 121 Computer Science I			
CSIT 221 Computer Science II			
CSIT 324 Object Oriented Programming			
CSIT 231 Systems Programming			
CSIT 241 Discrete Math for CS I / <i>MATH 231 Linear Algebra</i>			
CSIT 311 Assembly Language/Computer Organization			
CSIT 321 Paradigms of Programming Languages			
CSIT 341 Data Structures			
CSIT 425 Software Engineering			
CSIT 431 Introduction to Operating Systems			
CSIT 455 Relational and Object Databases			

## Software Development Requirements and Electives

MATH 120 Survey of Calculus I or MATH 122 University Calculus I			
MATH 121 Survey of Calculus II or MATH 123 University Calculus II			
CSIT 201 Computer Security and Ethics			
<i>CSIT 242 Discrete Math for Computer Science II</i>			
CS Elective*			
CS Elective (400 level)*			
CS Elective (400 level)*			

**\*Three additional computer science courses** must be taken the list below. **At least two courses must be at the 400 level:**

, CSIT 307 Web Development with Ruby on Rails , CSIT 475 Electronic Commerce, CSIT 411 Programming for Embedded Microcontrollers, CSIT 413 Computer Architecture, CSIT 435 Data Communications and Networks, CSIT 437 Advance Operating Systems, CSIT 456 Information and Decision Support Systems, CSIT 473 Data Warehousing and Mining, CSIT 433 Compiler Construction, CSIT 441 Design and Analysis of Algorithms, CSIT 443 Theory of Computation, CSIT 333 Mobile Programming, CSIT 461 Introduction to AI and Knowledge Engineering, CSIT 462 Computer Graphics, CSIT 463 Introduction to Digital Image Processing and Computer Vision, *MATH 231 Linear Algebra*

A maximum of two courses from the following list may be taken as CS electives; CSIT 490 Seminar on Selected Topics, CSIT 496 Special Topics, CSIT 497 Thesis, CSIT 499 Senior Project, CSIT 300 Internship, CSIT 291 Special Topics, CSIT 390 Directed Study, CSIT 400 Directed Independent Study

**Students must complete a minimum of 66 credits of non-CIS courses. Students must have GPA of at least 2.0, both overall and in the courses listed in the above checklist. Students must complete a minimum of 120 total credit hours All students WHO STARTED IN FALL 2015 OR AFTER seeking an undergraduate degree must complete 45 credit hours as the upper-level (300 and above)**

**Students may double major in Computer Science and Computer Information Systems by completing all requirements for both majors; the student is required to take at least 15 additional credit hours in the second major (credit hours from courses within the list of courses of the second major not used to satisfy requirements in the first major).**

**College Core Curriculum:** Refer to a separate CCC Report for details

**Student:** \_\_\_\_\_

**Anticipated Date  
of Completion:** \_\_\_\_\_

**Advisor:** \_\_\_\_\_