

COMPUTER SCIENCE MAJOR 2013-2014

This checklist is for reference only. Please see the College Catalog and check with your major adviser or department chair to assure compliance with graduation requirements.

Note: Pre-requisites in parentheses

Sem. Taken	Cr. Earned	I. Required Courses (28 credits):
		COSC 120 Introduction to Computer Science I
		COSC 130 Introduction to Computer Science II (COSC 120)
		MATH 151 Calculus I
		MATH 200 Discrete Mathematics
		or
		MATH 281 Foundation of Mathematics (MATH 152)
		COSC 201 Algorithms and Data Structures (COSC 130)
		COSC 230 Computer Architecture (COSC 130, MATH 200)
		COSC 251 Programming Languages (MATH 200/281 and COSC 201)

II. Elective Courses (20 semester-hours)

Five 4-credit classes:

		Course 1: _____
		Course 2: _____
		Course 3: _____
		Course 4: _____
		Course 5: _____

Courses selected from the following:

- COSC 301 Software Engineering I (**COSC 201**)
- COSC 335 Operating Systems (**COSC 230**)
- COSC 336 Computer Networks (**COSC 230**)
- COSC 338 Computer Graphics (**COSC 201 and MATH 152**)
- COSC 370 Artificial Intelligence (**COSC 201 and MATH 200 or MATH 281**)
- COSC 420 Distributed and Parallel Computing (**COSC 201**)
- COSC 438 Game Design and Development (**COSC 201, MATH 200 or MATH 281**)
- COSC 440 Theory of Computation (**COSC 201 and MATH 200 or MATH 281**)
- COSC 445 Design and Analysis of Algorithms (**COSC 201, MATH 200 or MATH 281**)
- COSC 450 Database Management Systems (**COSC 130, MATH 200 or MATH 281**)
- COSC 455 Graph Theory (**COSC 201, MATH 200 or MATH 281**)
- COSC 480 Topics in Computer Science (**COSC 130**)

III. Capstone Experience (8 semester-hours) Choose one of the following

three options:

a. St. Mary's Project (may be in an area other than COSC, with the approval of the department)

		COSC 493 St. Mary's Project
		COSC 494 St. Mary's Project

b. One 400-level computer science course**

		Course 1: _____
		COSC 495: Senior Project in Computer Science

or

c. Two 400-level computer Science courses**

		Course 1: _____
		Course 2: _____

** Excluding COSC499 and courses counted as elective courses