

COMPUTER SCIENCE MAJOR 2012-2013

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 (COSC 230; MATH200 or MATH281)

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 130**)
- COSC 338 Computer Graphics (**COSC 130**)
- COSC 370 Artificial Intelligence (**COSC 120**)
- COSC 420 Distributed and Parallel Computing (**COSC 130**)
- COSC 438 Game Design and Development (**COSC 201, MATH 200 or MATH281**)
- COSC 440 Theory of Computation (**COSC 251**)
- COSC 445 Design and Analysis of Algorithms (**COSC 201**)
- COSC 450 Database Management Systems (**COSC 201, MATH 200 or MATH281**)
- COSC 455 Graph Theory (**COSC 201, MATH 200 or MATH281**)
- 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

or

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