COMPUTER SCIENCE MAJOR 2014-2015

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 MATH281)**
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