Academic Map: Computer Science

Department:	Computer Science	**Degree:**	BS
Program/Major:	Computer Science		
Track/Emphasis:			
Does this program require a minor? (Yes/No)	No		

Important program information in the online *Undergraduate Bulletin*:

UCA Core Requirements:	http://uca.edu/ubulletin/general-policies-information/uca-core/
LD UCA Core Check Sheet:	http://uca.edu/academicbulletins/ld-uca-core/
UD UCA Core Course List:	http://uca.edu/academicbulletins/ud-uca-core/
Degree Requirements:	http://uca.edu/ubulletin/general-policies-information/degree-requirements/
Program Description:	http://uca.edu/ubulletin/colleges-departments-programs/college-of-natural-sciences-and-mathematics/department-of-computer-science/
Course Descriptions:	http://uca.edu/ubulletin/courses/

This degree program requires a total of 120 semester credit hours, including at least 40 upper-division credit hours.

Comparable courses in the Arkansas Course Transfer System (ACTS) are cross-referenced in the ACTS column of each semester block below; a core link (http://uca.edu/academicbulletins/ld-uca-core/) takes the user to the *Undergraduate Bulletin*'s UCA Lower-Division Core check sheet, where UCA Core options and ACTS course numbers are listed in full; an acts link takes the user to the *Undergraduate Bulletin*'s ACTS page (http://uca.edu/academicbulletins/acts/) for additional information and a UCA-ACTS crosswalk.

Year 1

Fall – Semester 1 (credit hours: 15)

SUBJ	NUM	TITLE	SCH	ACTS
CSCI	1470	Computer Science I	4	
MATH	1491 1496	Applied Calculus for Life Sciences or Calculus I	4	MATH2405
WRTG	1310	Introduction to College Writing	3	ENGL1013
		Lab Science Course[1]	4	acts link

Spring – Semester 2 (credit hours: 16)

SUBJ	NUM	TITLE	SCH	ACTS
CSCI	1480	Computer Science II	4	
MATH	2311	Elementary Statistics	3	MATH2103
WRTG ENGL	1320 1320	Academic Writing and Research or Interdisciplinary Writing and Research or Other approved alternative (LD UCA Core: Research/Writing)[2]	3	ENGL1023 ENGL1023 core link
		LD UCA Core Course[2]	3	core link
		LD UCA Core Course[2]	3	core link

Year 2

Fall – Semester 3 (credit hours: <u>16</u>)

SUBJ	NUM	TITLE	SCH	ACTS
CSCI	2320	Data Structures	3	
CSCI	2440	Assembly Language and Computer Organization	4	
MATH	2330	Discrete Structures I	3	
		LD UCA Core Course[2]	3	core link
		LD UCA Core Course[2]	3	core link

Spring – Semester 4 (credit hours: <u>15</u>)

SUBJ	NUM	TITLE	SCH	ACTS
CSCI	3370	Principles of Programming Languages	3	
CSCI	3380	Computer Architecture	3	
MATH	3330	Discrete Structures II	3	
		LD UCA Core Course[2]	3	core link
		LD UCA Core Course[2]	3	core link

Year 3

Fall – Semester 5 (credit hours: <u>15</u>)

SUBJ	NUM	TITLE	SCH	ACTS
		Lab Science Course[1]	4	acts link
CSCI	3190	Social Implications of Technology	1	
CSCI	3330	Algorithms	3	
CSCI	3360	Database Systems (UD UCA Core: C)	3	
		LD UCA Core Course[2]	3	core link
		General Elective Course	1	

Spring – Semester 6 (credit hours: <u>16</u>)

SUBJ	NUM	TITLE	SCH	ACTS
		Lab Science Course[1]	4	
CSCI	3381	Object Oriented Programming Languages	3	
CSCI	4300	Operating Systems	3	
MATH	3311	Statistical Methods II	3	
MATH	3320	Linear Algebra (UD UCA Core: I)	3	

Year 4

Fall – Semester 7 (Credit hours: <u>16</u>)

SUBJ	NUM	TITLE	SCH	ACTS
CSCI	4490	Software Engineering (UD UCA Core: Z)	4	
CSCI		Computer Science Elective[3]	3	
		UD UCA Core Course (UD UCA Core: R)	3	
		General Elective	3	
		General Elective	3	

Spring – Semester 8 (Credit hours: 11)

SUBJ	NUM	TITLE	SCH	ACTS
CSCI	4191	Seminar	1	
CSCI CSCI	4315	Information Security (UD UCA Core: R) or Another Computer Science Elective	3	
CSCI		Computer Science Elective[3]	3	
		General Elective(s)	4	

_____   _____
SIGNED – DEPARTMENT CHAIR   DATE

_____   _____
SIGNED – COLLEGE DEAN   DATE

To be completed by the advisor when an Eight-Semester plan is accepted by the student:

If applicable, has student selected a minor? Type "x" as appropriate. _____ No _____ Yes
If "yes," specify: _____

Notes

[1] This degree program requires a minimum of 12 credit hours in Lab Sciences in Biology, Chemistry, and Physics. Course sets that satisfy the requirement include BIOL 1440 and 1441 (Biology I and II), CHEM 1450 and 1451 (College Chemistry I and II), PHYS 1410 and 1420 (College Physics 1 and 2), and PHYS 1441 and 1442 (University Physics 1 and 2). A student must take a sequence (8 credits) from one of the three subject areas and one course from an area outside of the sequence.

[2] See appropriate choices, alternatives, or substitutions under "UCA Core" in the *Undergraduate Bulletin.* Prior to completion of 30 semester hours, a student must complete a UCA Core course designated as a First-Year Seminar (FYS) in Critical Inquiry, Diversity, or Responsible Living (one of the LD UCA Core courses in the second semester must be designated FYS).

The student will also need to complete major, minor, or general elective courses designated as fulfilling the upper-division and capstone requirements of the UCA Core. See annotations in this Academic Map and consult the *Undergraduate Bulletin* and your academic advisor for courses that fulfill these upper-division requirements.

[3] See the Department of Computer Science page in the *Undergraduate Bulletin* for a list of electives.