Academic Map: Computer Science

Department:	Computer Science and Engineering	**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:	https://uca.edu/ubulletin/general-policies-information/uca-core/
LD UCA Core Check Sheet:	https://uca.edu/academicbulletins/ld-uca-core/
UD UCA Core Course List:	https://uca.edu/academicbulletins/ud-uca-core/
Degree Requirements:	https://uca.edu/ubulletin/general-policies-information/degree-requirements/
Program Description:	https://uca.edu/ubulletin/colleges-departments/cn/computer-science/
Course Descriptions:	https://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 (https://uca.edu/academicbulletins/ld-uca-core/) takes the user to the *Undergraduate Bulletin*'s Lower-Division (LD) UCA 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 (https://uca.edu/academicbulletins/acts/) for additional information and a UCA-ACTS crosswalk.

Scholarship recipients: Please be aware of eligibility criteria for your scholarship(s). In particular, pay attention to (1) the enrollment requirements each semester for disbursement of your scholarship(s) and (2) the number of hours and GPA required each semester and/or year for renewal of your scholarship(s). Some Academic Maps may suggest enrollment in fewer hours than required for disbursement of your scholarship(s). In such cases, work with your academic advisor to adjust your schedule to meet requirements most efficiently. Contact the Office of Student Financial Aid at (501) 450-3140 with any questions regarding enrollment/renewal requirements of your scholarship(s). For online information resources, see endnote 1.

Year 1

Fall – Semester 1 (credit hours: 14)

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
		LD UCA Core Course (recommended First Year Seminar)[2]	3	core link

Spring – Semester 2 (credit hours: 16)

SUBJ	NUM	TITLE	SCH	ACTS
CSCI	1480	Computer Science II	4	
		LD UCA Core Course	3	core link
WRTG ENGL	1320 1320	Academic Writing and Research or Interdisciplinary Writing and Research or Other approved alternative (LD UCA Core: Research/Writing)	3	ENGL1023 ENGL1023 core link
		LD UCA Core Course (First Year Seminar, if not taken semester 1)	3	core link
		LD UCA Core Course	3	core link

Year 2

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

SUBJ	NUM	TITLE	SCH	ACTS
CSCI	2320	Data Structures	3	
CSCI	2335	Networking	3	
CSCI	2330	Discrete Mathematics for Computing	3	
		LD UCA Core Course	3	core link
		LD UCA Core Lab Science Course[3]	4	core link

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

SUBJ	NUM	TITLE	SCH	ACTS
CSCI	3360	Database Systems [UD UCA Core: C]	3	
CSCI	3370	Principles of Programming Languages	3	
CSCI	3380	Computer Architecture	3	
MATH	3311	Statistical Methods	3	
		LD UCA Core Course	3	core link

Year 3

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

SUBJ	NUM	TITLE	SCH	ACTS
		Computer Science Elective [4]	3	
CSCI	3330	Algorithms	3	
CSCI	4321	Ethical Implications [UD UCA Core: D, R]	3	
MATH	3320	Linear Algebra [UD UCA Core: I]	3	
		LD UCA Core Course	3	core link

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

SUBJ	NUM	TITLE	SCH	ACTS
		LD UCA Core Lab Science Course	4	core link
CSCI	3381	Object-Oriented Software Development with Java	3	
CSCI	4300	Operating Systems	3	
		Mathematics Elective[5]	3	
		Computer Science Elective	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	4315	Information Security [UD UCA Core: R]	3	
		General Elective	3	
		General Elective	3	
		General Elective	3	

Spring – Semester 8 (Credit hours: <u>12</u>)

SUBJ	NUM	TITLE	SCH	ACTS
		Computer Science Elective	3	
		Computer Science Elective	3	
		General Elective	3	
		General Elective	3	

_____   _____
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] See online information resources for UCA scholarships at https://uca.edu/scholarships/ and for state scholarships at https://scholarships.adhe.edu/scholarships-and-programs/a-z/.

[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 in the first year.

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] This degree program requires a minimum of 8 credit hours in Lab Sciences in Biology and Chemistry or Physics. Courses that satisfy the requirement include BIOL 1440 (Biology I), CHEM 1450 (College Chemistry I), PHYS 1410 (College Physics 1), and PHYS 1441 (University Physics 1).

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

[5] See the Department of Computer Science and Engineering page in the *Undergraduate Bulletin* for a list of Mathematics electives.