

Academic Map: Cybersecurity, Cyberphysical Security

Department: Computer Science and Engineering Degree: BS
 Program/Major: Cybersecurity
 Track/Emphasis: Cyberphysical Security
 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/programs-by-program/interdisciplinary/cybersecurity/>
 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/) (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](https://uca.edu/academicbulletins/acts/) 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 the Life Sciences or Calculus I (LD UCA Core [Quantitative])	4	MATH2405
WRTG	1310	Introduction to College Writing (LD UCA Core [Writing Foundation])	3	ENGL1013
PSCI	1330	LD UCA Core (First Year Seminar) ² or US Government and Politics (LD UCA Core [American Hist/Gov])	3	PLSC2003

Spring – Semester 2 (Credit hours: 17)

SUBJ	NUM	TITLE	SCH	ACTS
CSCI	1480	Computer Science II	4	
MATH CISA PSCI	2311 2330 2312	Elementary Statistics or Business Statistics or Statistical Methods for Political Analysis	3	MATH2103 BUSI2103
WRTG ENGL	1320 1320	Academic Writing and Research or Interdisciplinary Writing and Research (LD UCA Core [Res/Writing])	3	ENGL1023 ENGL1023

SUBJ	NUM	TITLE	SCH	ACTS
		LD UCA Core requirement (Lab Science) ²	4	core link
PSCI	1300	US Government and Politics (LD UCA Core [American Hist/Gov]) or LD UCA Core (First Year Seminar, if not taken semester 1)	3	PLSC2003

Year 2**Fall – Semester 3 (Credit hours: 16)**

SUBJ	NUM	TITLE	SCH	ACTS
CSCI	2320	Data Structures	3	
CSCI	2330	Discrete Mathematics for Computing	3	
CSEC	2300	Introduction to Cybersecurity	3	
		LD UCA Core requirement (Lab Science)	4	core link
PSCI	2300	International Relations (LD UCA Core: [Social Science])	3	

Spring – Semester 4 (Credit hours: 15)

SUBJ	NUM	TITLE	SCH	ACTS
CSEC	3300	Introduction to Number Theory and Cryptography	3	
CSCI	2335	Networking	3	
CSCI	4305	Linux/UNIX Systems	3	
		LD UCA Core requirement	3	core link
		LD UCA Core requirement	3	core link

Year 3**Fall – Semester 5 (Credit hours: 15)**

SUBJ	NUM	TITLE	SCH	ACTS
CSCI	3330	Algorithms	3	
CSCI	3360	Database Systems [UD UCA Core: C] ³	3	
CSCI	4321	Ethical Implications [UD UCA Core: D, R]	3	
CSEC	3320	Computer Forensics [UD UCA Core: I]	3	
		LD UCA Core requirement	3	core link

Spring – Semester 6 (Credit hours: 15)

SUBJ	NUM	TITLE	SCH	ACTS
CSCI	4315	Information Security [UD UCA Core: R]	3	
CISA	4361	Cybersecurity Governance and Policy	3	
CSCI	4300	Operating Systems	3	
MGMT	2301	Business Communications or other approved LD UCA Core [Oral Communication]	3	
		General Elective	3	

Year 4

Fall – Semester 7 (Credit hours: 15)

SUBJ	NUM	TITLE	SCH	ACTS
CISA	4355	Project Management [UD UCA Core: Z]	3	
PSCI	3316	Cybersecurity Law and Policy [UD UCA Core: C]	3	
CSEC	4335	Network Security [Concentration Requirement]	3	
CSEC	4320	Ethical Hacking [Concentration Requirement]	3	
		General Elective	3	

Spring – Semester 8 (Credit hours: 13)

SUBJ	NUM	TITLE	SCH	ACTS
CSEC	4490	Cybersecurity Capstone [UD UCA Core: Z]	4	
CSEC	4345	Cyberphysical Security [Concentration Requirement]	3	
CSCI	3V75	Internship or Approved alternative [Concentration Requirement]	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* and the lower-division UCA Core (LD UCA Core) Check Sheet ([core link](#)). During the first year, a student must complete a UCA Core course designated as a First-Year Seminar (FYS) in Critical Inquiry, Diversity, or Responsible Living. Specific LD UCA Core courses required by this program are explicitly listed in the AMAP.

³ 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 (UD UCA Core). See annotations in this AMAP for requirements in this program that fulfill UD UCA Core requirements; courses in the student’s selected Cybersecurity Concentration may also fulfill UD UCA Core requirements. See <http://uca.edu/academicbulletins/ud-uca-core/> for a complete list of courses approved for the UD UCA Core and capstone requirements.