

Academic Map: Cybersecurity, Cyberphysical Security

Department: _____ Computer Science _____ **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: <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/interdisciplinary-programs/cybersecurity/>
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/) (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](http://uca.edu/academicbulletins/acts/) 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: 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 2300	US Government and Politics (LD UCA Core [American Hist/Gov]) or International Relations (LD UCA Core [SS]) ¹	3	PLSC2003

Spring – Semester 2 (Credit hours: 17)

SUBJ	NUM	TITLE	SCH	ACTS
CSCI	1480	Computer Science II	4	
MATH QMTM 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
		LD UCA Core requirement (Physical Science) ²	4	core link
		LD UCA Core requirement (Social Science) or LD UCA Core requirement (American Hist/Gov) ¹	3	core link

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

SUBJ	NUM	TITLE	SCH	
CSCI	2320	Data Structures	3	
MATH	2330	Discrete Structures I	3	
CSEC	2300	Introduction to Cybersecurity	3	
		LD UCA Core requirement (Life Science)	4	core link
		LD UCA Core requirement (Fine Arts/Humanities)	3	core link

Spring – Semester 4 (Credit hours: 15)

SUBJ	NUM	TITLE	SCH	
CSEC	3300	Introduction to Number Theory and Cryptography	3	
CSCI	3330	Algorithms	3	
CSCI	3380	Computer Architecture	3	
		LD UCA Core requirement (Diversity in Creative Works)	3	core link
		LD UCA Core requirement (Responsible Living)	3	core link

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

SUBJ	NUM	TITLE	SCH	
CSCI	3335	Networking	3	
CSCI	3360	Database Systems (UD UCA Core: D) ³	3	
CSCI	4300	Operating Systems	3	
CSCI	4315	Information Security (UD UCA Core: R)	3	
		LD UCA Core requirement (Diversity in World Cultures)	3	core link

Spring – Semester 6 (Credit hours: 15)

SUBJ	NUM	TITLE	SCH	
CSEC	3320	Computer Forensics	3	
MIS	4361	Cybersecurity Governance and Policy	3	
PHIL	3320 3325 4320	Ethics (UD UCA Core: I, R) or Political Philosophy (UD UCA Core: I, R) or Applied Ethics (UD UCA Core: D, R) ⁴	3	
CSEC	4335	Network Security [Concentration Requirement]	3	
		General Elective	3	

Year 4**Fall – Semester 7 (Credit hours: 15)**

SUBJ	NUM	TITLE	SCH	
MIS	4355	Project Management	3	
PSCI	3316	Cyber Security Law and Policy	3	
MGMT	2301	Business Communications (LD UCA Core [Oral Communication])	3	
CSEC	4320	Ethical Hacking [Concentration Requirement]	3	
		General Elective	3	

Spring – Semester 8 (Credit hours: 13)

SUBJ	NUM	TITLE	SCH	
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 All majors must take either PSCI 1330 or PSCI 2300; for those in the Cybersecurity Strategic Policy concentration, both courses are required. Both courses may be used to meet requirements of the lower-division UCA Core.

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.

⁴ A student who has taken or plans to take PHIL 4320 in the Cybersecurity core will need to select in the General Electives category a course with the [UD UCA Core: I] designation; a student who has taken or plans to take PHIL 3320 or 3325 in the Cybersecurity core will need to select in the General Electives category a course with the [UD UCA Core: D] designation.