

## Requirements for the B.S. Degree in Cybersecurity

Department of Computer Science, University of Central Arkansas 1/17/19 revised

### CSEC Required Courses (38 hours)

Code	Title	Prerequisites
CSCI 1470	Computer Science I	MATH 1390
CSCI 1480	Computer Science II	CSCI 1470
CSEC 2300	Intro to Cybersecurity	CSCI 1470
CSCI 2320	Data Structures	CSCI 1480
CSEC 3300	Number Theory and Cryptography	CSEC 2300, MATH 2330*
PSCI 3316	Cyber. Law and Policy	PSCI 1330, 2300
PHIL 3320 or PHIL 3325 or PHIL 4320	<b>(I, R)</b> Ethics or <b>(I, R)</b> Political Phil. or <b>(D, R)</b> Applied Ethics	
CSCI 3330	Algorithms	CSCI 2320, MATH 2330*
CSCI 3335	Networking	CSCI 2320
CSCI 3360	<b>(C)</b> Database Syst.	CSCI 2320
CSCI 3380	Computer Arch.	CSCI 2320
CSEC 3320	Computer Forensics	CSEC 2300
CSCI 4300	Operating Systems	Upper level status, CSCI 3330
CSCI 4315	<b>(R)</b> Information Sec.	CSCI 2320
MIS 4355	Project Management	MIS 3321, CSCI 3360
MIS 4361	Cybersecurity Gov.	CSEC 2300/ MIS 3321
CSEC 4490	<b>(Z)</b> Cyber. Capstone**	CSCI 4315, PHIL 3320/3325/4320

### Math Required Courses (6 hours)

Code	Title	Prerequisites
MATH 2311 or QMTM 2330 or PSCI 2312	Elementary Statistics or Business Statistics or Statistics Methods	MATH 1390
MATH 2330 or CSCI 4360	Discrete Structures I or Discrete Math. for Computer Science	CSCI 1470, MATH 1491/1496 CSCI 1470, MATH 1491/1496

### Concentration\*\*\* courses (12 hours)

Code	Title	Prerequisites
<b>Cybersecurity Strategic Policy</b>		
PSCI 3369	Cyber Citizenship	PSCI 1330, 2315
PSCI 4301	<b>(I)</b> Civil Liberties	PSCI 1330
PSCI 4340	Seminar: International Terrorism	
PSCI 4388	American Foreign Policy	PSCI 1330, 2300
<b>Management of Cybersecurity</b>		
MIS 3321	Managing Systems and Technology	
MIS 3382	Internship or advanced course approved by chair	Junior status
MIS 4360	Principles of Information Security	
MIS 4380	Business Intelligence	MIS 3321/ MATH 4373
<b>Cyberphysical Security</b>		
CSCI 3V75	Internship or advanced course approved by chair	Junior status
CSEC 4320	Ethical Hacking	CSCI 3330, 3335, CSEC 2300, PHIL 3320/ 3325/4320
CSEC 4335	Network Security	CSCI 4315
CSEC 4345	Cyber-Physical Security	CSCI 3335, CSCI 4315

\* or, equivalently, CSCI 4360: Discrete Mathematics for Computer Science

\*\* Corequisite: MIS 4355

\*\*\* Choose one concentration

Notes:

1. Prerequisites columns: "A,B" means "A and B"; "A/B" means "A or B".
2. UCA Upper-Division Core: **(C)** Communication, **(I)** Critical Inquiry, **(D)** Diversity, **(R)** Responsible Living, **(Z)** Capstone

For additional information, consult your academic advisor or visit

<https://bit.ly/2QfEkz1>