# CYBERSECURITY (START ODD YEARS)

### **Bachelor of Science**



### SEMESTER 1 (FALL)

Course	Credits	Grade	<b>~</b>
ENGL 101: Composition & Rhetoric I	3	C*	
MATH 103: College Algebra	3		
CS 151: Introduction to Computer Science	3		
CS 232: Introduction to Computer Security	3		
General Education/Elective	2-3		
UNIV 100: CU Foundations	1		

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### SEMESTER 2 (SPRING)

Course	Credits	Grade		<b>~</b>
ENGL 102: Composition & Rhetoric II	3	C*	<b> ~</b>	
CS 252: Data Structures & Object Oriented Programming	3			
CS 282: Database and Information Management	3			
MATH 219: Discrete Mathematics	3			
CS 221: Computer Networking	3			
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SEMESTER 3 (FALL)

Course	Credits	Grade	<b>✓</b>
CS 382: Cybersecurity Program Management	3		
CS 281: Linux System Administration	3		
CS 351: Web Development* or General Education/ Elective	3		
CS 332: Network Security	3		
General Education/Elective	3		
	15		

#### SEMESTER 4 (SPRING)

Course	Credits Grade	<b>~</b>
CS 431: Penetration Testing	3	
CS 333: Secure Coding	3	
MATH 105: Elementary Statistics	3	
General Education/Elective	3	
General Education/Elective	3	

The Bachelor of Science in Cybersecurity Concord 's curriculum is designed to give students a thorough understanding of the core tenants of

cybersecurity; effective program management; prevention and detection of cybersecurity events; defensive architectures; managing responses and mitigations; and designing information systems securely. The program prepares students for a wide variety of careers and graduate school.

**MILESTONE COURSES** 

Courses marked as Milestone Courses are crucial for staying on track to complete your degree in four years. Take them in the rec-

ommended semester to stay on track! If you see a recommended minimum grade, this is the grade you need to earn to have the best chance for success in this degree! Grades marked with an asterisk are required to pass.

### HELPFUL HINTS

- CS 151 is prerequisite to all other computer science courses.
- Only offered Fall semester, every year: CS 272.
- Only offered Fall semester, every other year: CS 281, CS 351.
- Only offered Spring semester, every year: CS 232, CS 252, CS 282, MATH 219.
- Only offered Spring semester, every other year: CS 221.

## CYBERSECURITY (START ODD YEARS)

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**Bachelor of Science** 

### SEMESTER 5 (FALL)

Course	Credits Grade	<b>~</b>
CS 341: Cryptography	3	
CS 331: Digital Forensics and Incident Response	3	
CS 325: Computer Organization and Hardware	3	
CS 381: System Analysis and Design	3	
CS 352: Mobile Development* or General Education/Elective	3	
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#### SEMESTER 6 (SPRING)

Course	Credits Grade	~
CS 432: Reverse Engineering	3	
General Education/Elective	3	

## SEMESTER 7 (FALL) T

Course	Credits Grade	<b>~</b>
CS 456: Capstone Project 1	2	)
General Education/Elective	3	
General Education/Elective	3	
General Education Science	4	
General Education/Elective	3	

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### SEMESTER 8 (SPRING) \( \bar{Y} \)

Course	Credits Grade	<b>~</b>
CS 457: Capstone Project 2	2	)
General Education/Elective	3	
General Education/Elective	3	
General Education/Elective	3	
General Education/Elective	3-4	

14-15



#### **ADVISING**

When you choose to pursue this degree, you will be assigned an advisor who is an expert in the field of Computer Information Systems. This advisor can help you with course selection, career planning, resume building, and help you with tracking your path to degree completion.

#### **CAREERS**

With a degree in Cybersecurity, you will be prepared for careers such as: Cybersecurity Analyst; Security Engineer; Security Consultant; Penetration Tester; and Security Operations Center Analyst.

#### COMPLEMENTARY MINORS

Students majoring in Cybersecurity complete coursework in cybersecurity, computer science, and mathematics. The major pairs well with most minors.

CAPSTONE

The Cybersecurity degree culminates in a Capstone Project. Students will take CS 456

and 457 in their senior year to fulfill this requirement.

## HELPFUL HINTS

- Only offered Fall semester, every year: CS 325.
- Only offered Fall semester, every other year: CS 253, CS 283, S 341, CS 381, CS 382.
- Only offered Spring semester, every other year: CS 332, CS 374, CS 384, CS 431, CS 432.