

# Cybersecurity (B.S.)

2025-2026 Academic Catalog, Bachelor of Science – Cybersecurity

## Academic Core for B.S.

45 Hours

CHRISTIAN STUDIES		6
CSBS 1311	Engaging the Old Testament	3
CSBS 1312	Engaging the New Testament	3

ENGLISH		9
ENGL 1321	Rhetoric & Composition I	3
ENGL 1322	Rhetoric & Composition II	3
ENGL	Literature	3

A grade of a "C" or higher is required in ENGL 1321 and ENGL 1322.

EXERCISE & SPORT SCIENCE – SELECT TWO DIFFERENT COURSES		2
EXAC	Activity Course	1
EXAC	Activity Course	1

FINE ARTS – SELECT ONE		3
ARTS 1310	Drawing I	3
ARTS 1320	Design	3
ARTS 1350	Art Appreciation	3
ARTS 2360	Ceramics I	3
COMM 2335	Film Appreciation	3
FINA 2330	Exploring the Fine Arts	3
MUSI 1340	Music Appreciation	3
THEA 2350	Theatre Appreciation	3

WORLD CULTURES – SELECT ONE		3
ARTS 2354	World Art	3
EXSS 2353	Lifespan Nutrition	3
GLBL 2310	Cultural Immersion	3
HIST 1311	History of World Civilizations to 1500	3
HIST 1312	History of World Civilizations since 1500	3
HIST 2350	An Introduction to the Politics and Culture of Ancient Greece and Rome	3
HUMA 2355	Foundations of the Humanities	3
MUSI 2358	World Music	3
PHIL 2315	Introduction to Philosophy	3

LAB SCIENCE		8
	Laboratory Science Courses	8

PUBLIC SPEAKING		3
COMM 1320	Public Speaking	3

MATHEMATICS		4
MATH 1430	Calculus I	4

SOCIAL SCIENCE		3
PSYC 1301	General Psychology	3

US HISTORY OR US GOVERNMENT – SELECT ONE		3
HIST 2311	American History to 1877	3
HIST 2312	American History since 1877	3
POLS 2305	United States Government	3
POLS 2306	Texas State and Local Government	3

RESEARCH METHODS OR INTERNSHIP		0
	Practical Experience – 300 Hrs. of Practical Work	-

FRESHMAN SEMINAR		1
UMHB 1101	Freshman Seminar	1

CHAPEL – 1 to 4 credits		
UMHB 1002	Chapel	

Fine Arts Experience – 2 to 8 credits		
UMHB 1005	Fine Arts Experience	

## Cybersecurity

60 Hours

B.S. CYBERSECURITY MAJOR REQUIRED COURSES		60
CYBR 1306	Introduction to Cybersecurity	3
CISC 1305	Introduction to Computing	3
CYBR 2310	Cybercrime and Governance	3
CYBR 4310	The Future of Cybersecurity	3
CISC 2315	Discrete Structures of Computer & Eng. Sciences	3
CISC 2330	Introduction to Object-Oriented Programming	3
CYBR 3350	Security Operations	3
CISC 3321	Object Oriented Development	3
CISC 3323	Algorithms & Data Structures	3
CISC 3325	Telecommunications & Networks	3
CISC 3341	Operating Systems	3
CISC 4324	Network Security	
	or	
CYBR 3320	Network & Systems Security	3
CISC 4325	Network Security II: Cryptography	3
CISC 4328	Computer Security	3
CYBR 3370	Ethical Hacking	3
CYBR 4350	Cybersecurity Capstone	3
CYBR 3180	Cybersecurity Seminar	1
CYBR 3180	Cybersecurity Seminar	1
CYBR 3180	Cybersecurity Seminar	1
CYBR 3180	Cybersecurity Seminar	1
CYBR 3180	Cybersecurity Seminar	1
CYBR 3180	Cybersecurity Seminar	1
MATH 2320	Linear Algebra	3
WRIT 3344	Scientific Writing	3

## Electives

15 Hours

ELECTIVES		15
You need 15 additional hours to reach your minimum 120 required hrs.		

## Total Hours

Academic Core for B.S.	45
B.S. Cybersecurity Major Required Courses	60
Electives	15
<b>Total hours required for graduation</b>	<b>120</b>

## Additional Graduation Requirements

Minimum Upper Level hours	36
Minimum hours taken at UMHB	30
Minimum Upper Level hours taken at UMHB	24
Minimum cumulative GPA	2.0

# Cybersecurity (B.S.)

2025-2026 Academic Catalog, Bachelor of Science – Cybersecurity – DEGREE SEQUENCE

## **FRESHMAN FALL 14 Hours**

CYBR 1306	Introduction to Cybersecurity	3
ENGL 1321	Rhetoric & Composition I	3
CSBS 1311	Engaging the Old Testament	3
CYBR 3180	Cybersecurity Seminar	1
MATH 1320	Precalculus	3
UMHB 1101	Freshman Seminar	1
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

## **FRESHMAN SPRING 16 Hours**

ENGL 1322	Rhetoric and Composition II	3
MATH 1430	Calculus I	4
CISC 1305	Introduction to Computing	3
PSYC 1301	General Psychology	3
COMM 1320	Public Speaking	3
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

## **SOPHOMORE FALL 15 Hours**

	Elective (MATH 2330 recommended)	3
CSBS 1312	Engaging the New Testament	3
ENGL 23XX	Literature	3
CISC 2330	Introduction to Object Oriented Programming	3
CYBR 2310	Cybercrime and Governance	3
CYBR 3180	Cybersecurity Seminar	1
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

## **SOPHOMORE SPRING 14 Hours**

CISC 2315	Discrete Structures of Computer Science	3
	Lab Science	4
	Elective	3
EXAC	Activity Course	1
	US History or Government	3
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

## **JUNIOR FALL 15 Hours**

CISC 3321	Object Oriented Development	3
	Elective (CISC 3322 recommended)	3
CYBR 3350	Security Operations	3
	Lab Science	4
CYBR 3180	Cybersecurity Seminar	1
EXAC	Activity Course	1
UMHB 1005	Fine Arts Experience	0

## **JUNIOR SPRING 16 Hours**

	Elective (CISC 3360 recommended)	3
CISC 3323	Algorithms & Data Structures	3
	Fine Arts	3
CYBR 3370	Ethical Hacking	3
	World Cultures	3
CYBR 3180	Cybersecurity Seminar	1
UMHB 1005	Fine Arts Experience	0

## **SENIOR FALL 16 Hours**

CISC 3341	Operating Systems	3
CYBR 4310	The Future of Cybersecurity	3
	CISC 4324 or CYBR 3320	3
WRIT 3344	Scientific Writing	3
CYBR 3180	Cybersecurity Seminar	1
CISC 3325	Telecommunications and Networks	3
UMHB 1005	Fine Arts Experience	0

## **SENIOR SPRING 13 Hours**

CYBR 4350	Cybersecurity Capstone	3
CISC 4325	Cryptography	3
CISC 4328	Computer Security	3
	Elective	3
CYBR 3180	Cybersecurity Seminar	1
UMHB 1005	Fine Arts Experience	0

**Total Credit Hours: 120**