

B.S. in Cyber Security (Comprehensive Major)
 Four Year Curriculum Guide (Odd Years)
 Department of Mathematics and Computer Science

Year 1 Fall Semester			Year 1 Spring Semester		
Course #	Title	Cr.	Course #	Title	Cr.
CS 101	Logic and Computing (fall only)	3	CYB 190	Cybersecurity Management (spring)	3
CYB 180	Foundations of Computer Security (fall)	3	ENG 102	Composition II (Core 3)	3
HSEC 180	Introduction to Homeland Security	3	CORE	Institutional Requirement (Core 4)	3
ENG 101	Composition I (Core 1)	3	CORE	Institutional Requirement (Core 5)	3
CORE	Institutional Requirement (Core 2)	3	CORE	Institutional Requirement (Core 6)	3
	TOTAL	15		TOTAL	15

Year 2 Fall Semester			Year 2 Spring Semester		
Course #	Title	Cr.	Course #	Title	Cr.
CYB 295	Digital Forensics and Investigation (fall even)	3	CYB 185	Cyber Ethics (spring odd)	3
PSYCH 101	General Psychology I (Core 7)	3	CYB 290	Computer Networks and Security (spring odd)	3
CORE	Institutional Requirement (Core 8)	3	CS 221	The Linux Operating System (spring odd)	3
CORE	Institutional Requirement (Core 9)	3	CORE	Institutional Requirement (Core 11)	3
CORE	Institutional Requirement (Core 10)	3	GENERAL	General Elective (1)	3
	TOTAL	15		TOTAL	15

Year 3 Fall Semester			Year 3 Spring Semester		
Course #	Title	Cr.	Course #	Title	Cr.
CYB 375	Cloud Computing & Security (fall odd)	3	CYB 275	Operating System Security (spring even)	3
CYB 390	Ethical Hacking & Penetration Testing (fall odd)	3	CYB 395	Applied Cryptography (spring even)	3
CORE	Institutional Requirement (Core 12)	3	CYB 495	Cybersecurity Research (capstone) Project (spring even)	3
CORE	Institutional Requirement (Core 13)	3	MATH 108	Introductory Statistics (Core 15)	3
CORE	Institutional Requirement (Core 14)	3	GENERAL	General Elective (2)	3
	TOTAL	15		TOTAL	15

Year 4 Fall Semester			Year 4 Spring Semester		
Course #	Title	Cr.	Course #	Title	Cr.
CJ 242	Criminology (fall)	3	CS/CJ	Internship	3
CYB 490	Reverse Engineering & Vulnerability Assessment (fall even)	3	ELECTIVE	Cybersecurity Elective (2)	3
GENERAL	Cybersecurity Elective (1)	3	ELECTIVE	Cybersecurity Elective (3)	3
GENERAL	General Elective (3)	3	GENERAL	General Elective (5)	3
GENERAL	General Elective (4)	3	GENERAL	General Elective (6)	3
	TOTAL	15		TOTAL	15

B.S. in Cyber Security (Comprehensive Major)
 Four Year Curriculum Guide (Even Years)
 Department of Mathematics and Computer Science

Year 1 Fall Semester			Year 1 Spring Semester		
Course #	Title	Cr.	Course #	Title	Cr.
CS 101	Logic and Computing (fall)	3	CYB 185	Cyber Ethics (spring odd)	3
CYB 180	Foundations of Computer Security (fall)	3	CYB 290	Computer Network & Security (spring odd)	3
HSEC 180	Introduction to Homeland Security	3	ENG 102	Composition II (Core 3)	3
ENG 101	Composition I (Core 1)	3	MATH 108	Introductory Statistics (Core 4)	3
CORE	Institutional Requirement (Core 2)	3	CORE	Institutional Requirement (Core 5)	3
	TOTAL	15		TOTAL	15

Year 2 Fall Semester			Year 2 Spring Semester		
Course #	Title	Cr.	Course #	Title	Cr.
PSYCH 101	General Psychology I (Core 6)	3	CYB 190	Cybersecurity Management (spring even)	3
CYB 390	Ethical Hacking & Penetration Testing (fall odd)	3	CYB 275	Operating System Security (spring even)	3
CORE	Institutional Requirement (Core 7)	3	CORE	Institutional Requirement (Core 10)	3
CORE	Institutional Requirement (Core 8)	3	CORE	Institutional Requirement (Core 11)	3
CORE	Institutional Requirement (Core 9)	3	GENERAL	General Elective (1)	3
	TOTAL	15		TOTAL	15

Year 3 Fall Semester			Year 3 Spring Semester		
Course #	Title	Cr.	Course #	Title	Cr.
CYB 295	Digital Forensics and Investigation (fall even)	3	CS 221	The Linux Operating System (spring odd)	3
CYB 490	Reverse Engineering & Vulnerability Assessment (fall even)	3	ELECTIVE	Cybersecurity Elective (1)	3
CJ 242	Criminology (fall)	3	CORE	Institutional Requirement (Core 14)	3
CORE	Institutional Requirement (Core 12)	3	GENERAL	General Elective (2)	3
CORE	Institutional Requirement (Core 13)	3	GENERAL	General Elective (3)	3
	TOTAL	15		TOTAL	15

Year 4 Fall Semester			Year 4 Spring Semester		
Course #	Title	Cr.	Course #	Title	Cr.
CYB 375	Cloud Computing & Security (fall odd)	3	CYB 395	Applied Cryptography (spring even)	3
ELECTIVE	Cybersecurity Elective (2)	3	CS/CJ	Internship	3
CORE	Institutional Requirement (Core 15)	3	ELECTIVE	Cybersecurity Elective (3)	3
GENERAL	General Elective (4)	3	GENERAL	General Elective (6)	3
GENERAL	General Elective (5)	3	CYB 495	Cybersecurity Research Project (spring even)	3
	TOTAL	15		TOTAL	15