



BAS: Cybersecurity

Bachelor of Applied Science Map 2024-2025

Required Courses	Titles	Credit
General Education Required Courses:		Credits
ENG 1031	Technical Writing	3
MAT 1340	College Algebra (or higher)	4
Social & Behavioral Science GT Course (ANT 1001 or 1002, ECO 1001 or 2001, GEO 1005, HIS 1110, PSC 1001, PSY 1001, SOC 1001, CRJ 1010)		3
Arts & Humanities GT course (ART 1110 or 1111, FR 1001, HUM 1003, JPN 1001, LIT 1015, MUS 1000, PHI 1013 or 1012, SPA 1001)		3
Natural & Physical Science GT course (BIO 1111, CHE 1011, PHY 1111)		5
Choose 1 from the following		3
COM 1015	Public Speaking (3)	
COM 1025	Interpersonal Communication (3)	
Sub Total General Education		21
Required Courses Lower Division		
CIS 2020	Fundamentals of Unix	3
CIS 2068	Systems Analysis and Design	3
CNG 1021	Computer Technician I: A+	4
CNG 1024	Networking I: Net+	3
CNG 1032	Network Security Fundamentals	3
CNG 1033	Fire Walls / Network Security	3
CNG 1036	Guide to IT Disaster Recovery	3
CNG 2056	Vulnerability Assessment I	3
CNG 2057	Network Defense / Countermeasures	3
CNG 2058	Digital Forensics	4
CNG 2059	Enterprise Security	4
CSC 1019	Introduction to Programming: Python	3
Sub Total Lower Division Required		39
		cont.



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Choose 3 Credits from the following		3
CIS 1018 or CIS 1055	Intro to PC Apps or Complete Spreadsheets: Excel (3)	
CIS 2043	Intro SQL (3)	
CIS 2089	Capstone (3)	
CNG 1042	Intro to Cloud Computing (3)	
CNG 2002	Linux Server (3)	
CNG 2012	Configuring Windows Server (4)	
CNG 2043	Cloud Security and Cyber Law	
CNG 2080	Internship (3)	
Faculty Approved Elective (3)		
Sub Total Lower Division Elective		3
Required Courses Upper Division		
CNG 3010	Fundamentals of Cyber Security	4
CNG 3020	Cyber law Ethics and Policy	4
CNG 3030	Methods of Network Analysis	4
CNG 3036	Business Continuity and Disaster Recovery	4
CNG 3040	Cyber Operations	4
CNG 3050	Cyber Investigations and Forensics	4
CNG 3056	Vulnerabilities Assessment II	4
CNG 4000	Active Cyber Defense	4
CNG 4010	Cyber Threat Intelligence	4
CNG 4020	Zero Trust Networks	4
CNG 4030	Cyber War	4
CNG 4054	Malware Threats and Analysis	4
CNG 4080	Internship	2
CSC 3026	Secure Scripting of Operating Systems	3
Sub Total Upper Division Required		53
Choose 4 Credits from the following		4
CSC 3000	Advanced Computer Architecture (4)	
CSC 3022	Security Fundamentals and Databases	
Faculty Approved Elective (4)		
Sub Total Upper Division Elective		4
TOTAL CREDITS		120



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First Semester:

Complete	Course Number	Title	Credits	Prerequisite
	ENG 1031	Technical Writing	3	
	MAT 1340	College Algebra	4	
	CSC 1019	Introduction to Programming	3	
	S & B Sci		3	

Second Semester:

Complete	Course Number	Title	Credits	Prerequisite
	CIS 2020	Fundamentals of Unix	3	
	Art & Hum		3	
	COM		3	
	CNG 1021	Computer Tech I: A+	4	
	CNG 1024	Networking I: Net+	3	

Third Semester:

Complete	Course Number	Title	Credits	Prerequisite
	CNG 1032	Network Security Fundamentals	3	
	CNG 1033	Firewalls/ Network Security	3	
	Nat & Phy Sci		5	
	CNG 1036	Guide to IT Disaster Recovery	3	
	CIS 2068	System Analysis and Design	3	

Fourth Semester:

Complete	Course Number	Title	Credits	Prerequisite
	CNG 2056	Vulnerability Assessment I	3	
	CNG 2057	Network Defense / Countermeasures	3	
	CNG 2058	Digital Forensics	4	
	CNG 2059	Enterprise Security	4	

Fifth Semester:

Complete	Course Number	Title	Credits	Prerequisite
RRCC	CNG 3036	Business Continuity and Disaster Recovery	4	
PPSC	CNG 3020	Cyberlaw Ethics and Policy	4	
PCC	CNG 3010	Fundamentals of Cyber Security	4	
RRCC	Elective		3/4	



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Sixth Semester:

Complete	Course Number	Title	Credits	Prerequisite
RRCC	CNG 3030	Methods of Network Analysis	4	
PPSC	CNG 3050	Cyber Investigations and Forensics	4	
PPSC	CNG 3040	Cyber Operations	4	
RRCC	Elective		4	

Seventh Semester:

Complete	Course Number	Title	Credits	Prerequisite
PPSC	CNG 3056	Vulnerabilities Assessment II	4	
RRCC	CNG 4000	Active Cyber Defense	4	
PPSC	CNG 4010	Cyber Threat Intelligence	4	
RRCC	CSC 3026	Secure Scripting of Operating Systemes	3	

Eighth Semester:

Complete	Course Number	Title	Credits	Prerequisite
RRCC	CNG 4020	Zero Trust Networks	4	
PPSC	CNG 4030	Cyber War	4	
RRCC	CNG 4054	Malware Threats and Analysis	4	
RRCC	CNG 4080	Internship	2	