

Bachelor of Science in Cybersecurity four-year Study plan (120 credit hours):

Year	First Semester	Credits	Prerequisites	Second Semester	Credits	Prerequisites	Summer Semester	Credits
First Year	ENG103: English I	3	None	ENG104: English II	3	ENG103		
	MAT110: Calculus I	3	None	MAT120: Calculus II	3	MAT110		
	CIT101: Computer Concepts and Applications	3	None	MAT130: Linear Algebra	3	MAT110		
	PHY110: General Physics I	3	None	MTH100: College Algebra	3	None		
	GED101: Islamic Culture	3	None	GEN210: Programming with Python	3	CIT101		
	CHM110: General Chemistry I	3	None	SYS200: Discrete Mathematics	3	MAT110		
	Total		18			18		
Second Year	IES111: Innovation, Entrepreneurship, and Sustainability	3	None	GED-Free Elective	3	None		
	ECE210: Digital Systems	3	None	SYS330: Operating Systems and Lab	3	SYS200, MAT110		
	ECE325: Digital Systems Lab	1	None	SYS340: Data Structures	3	SYS200		
	SYS240: Introduction to Cybersecurity Engineering	3	None	SYS345: Fundamentals of Data & Network Communication	3	SYS200		
	SYS310: C++ Object-Oriented Programming	3	GEN210					
	SYS320: C++ Object-Oriented Programming Lab	1	GEN210					

Total		14			12			
Third Year	SYS350: Introduction to Network Security	3	SYS200, SYS240	SYS410: Cryptography Fundamentals	3	SYS350		
	SYS370: Database Management Systems	3	SYS200	SYS425: Secure Software Engineering	3	SYS310		
	IES112: Introduction to Environmental Sustainability	3	None	SYS428: Information Security Policy and Governance	3	SYS200		
	GED112: Contemporary Emirati Studies	3	None	SYS430: System Security and Resilience	3	SYS200, SYS240		
	SYS485: Internship I	2	60 cr. Hrs + GPA>2.0	SYS385: Cybersecurity Architecture and Design	3	SYS350		
Total		14			15			
Fourth Year	SYS486: Internship II	2	SYS485	SYS472: Information Privacy and Security	3	SYS350		
	SYS440: Cyber Vulnerability/Ethical Hacking Laboratory	2	SYS340, SYS350	SYS474: Reverse Software Engineering	3	SYS350		
	SYS450: Cyber Vulnerability/Penetration Testing Laboratory	2	SYS340, SYS350	One Major Elective	3	None		
	SYS460: Cyber Vulnerability/Computer Forensics Laboratory	2	SYS240, SYS350	One Major Elective	3	None		
	SYS470: Industrial Control Systems Security	3	SYS240, SYS350	SYS490: Senior Graduation Project	3	SYS470, SYS474		
	One Major Elective	3						
Total		14			15			