

Degree and Study Plan

College	Engineering
Department	Electrical Engineering and Computer Science
Program	Cyber Security
Degree Level	Bachelor of Science
Total Credit Hours	123
Cohort	2018 and after

Summary of Credits	
University Requirements (UR)	12
College Requirements (CR)	18
Program Requirements (PR)	87
Program Electives (PE)	6
Total	123

For more information contact: Dr. Adnan Kabbani, HoD.

HoD:



Dean:



Date: 30/09/2024

Year One	Semester 1 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ENGL101	English Communication Skills 1	3		UR
	ISLM101	Islamic Civilization	3		UR
	MATH101	Calculus I	3		CR
	INTE101	Information Technology Fundamentals	3		PR
	INTE105	Introduction to Computer Programming	3		PR
	Total Credits		15		
	Semester 2 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CYSE 120	Fundamentals of Cybersecurity	3		PR
	MATH102	Calculus II	3	MATH101	CR
	MATH140	Discrete Math	3	INTE105	CR
	ENGL102	English Communication Skills 2	3	ENGL101	UR
	INTE130	Object Oriented Programming	3	INTE105	PR
	Total Credits		15		

Year Two	Semester 3 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CYSE201	Data Structures and Algorithms	3	INTE105	PR
	MATH215	Linear Algebra	3	MATH101	CR
	CYSE202	Forensic Fundamentals & Investigations	3	CYSE120	PR
	CYSE203	Database Systems Development	3	INTE130	PR
	CYSE204	Cyber Ethics	3	CYSE120	PR
	Total Credits		15		
	Semester 4 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CYSE210	Computer Architecture and Operating Systems	3	CYSE201	PR
	MATH204	Probability and Statistics	3	MATH102	CR
	INTE110	Web Application Development	3	INTE105	PR
	CYSE220	Cyber Forensics	3	CYSE120	PR
	CYSE230	Computational Thinking	3		PR
	Total Credits		15		

Year Three	Semester 5 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	MNGT313	Entrepreneurship	3		UR
	INTE207	Computer Networks I	3		PR
	INTE310	Technical Writing	3		PR
	CYSE303	Secure Software Development	3	CYSE220	PR
	CYSE304	Biometric Authentication	3	CYSE202	PR
	Total Credits		15		
	Semester 6 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CYSE310	Ethical Hacking I	3	INTE207	PR
	CYSE320	Network Security and Cryptography	3	INTE207	PR
	INTE230	Incident Response Management	3	CYSE202	PR
	INTE305	Rapid Applications Development	3	INTE130	PR
	CYSE350	Risk Analysis and Management	3		PR
	Total Credits		15		
	Summer				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CYSE470	Internship	3		PR

Year Four	Semester 7 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CYSE401	Advanced Network Security and Forensics	3	CYSE320	PR
	MNGT201	Principles of Management	3		CR
	CYSE402	Ethical Hacking II	3	CYSE310	PR
	CYSE403	Penetration Detection	3	CYSE310	PR
		Elective I	3		PE
	Total Credits		15		
	Semester 8 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CYSE410	Information Security Management Systems	3	CYSE320	PR
		Elective II	3		PE
	CYSE430	Cyber Law and Legal Regulations	3		PR
	CYSE440	Malware Forensics	3	CYSE401	PR
	CYSE475	Research Project	3		PR
	Total Credits		15		

List of Program Elective Courses:

A student must register in 2 courses with total of 6 credits hours following the program study plan:			
Course Code	Course Title	Credits	Pre-Request/ Co-Request*
CYSE330	Data Backup & Recovery	3	
INTE407	Block-Chain Technologies	3	
CYSE420	Database and Distributed Systems Security	3	
INTE450	Internet of Things	3	