

BACHELOR OF SCIENCE IN CYBERSECURITY

FRESHMAN YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course Number	Course Title	Credit Hours	Pre-requisite	Course Number	Course Title	Credit Hours	Pre-requisite
ALIS 1211	Introduction to Islamic Culture	2		ALIS 1212	The Social System in Islam	2	
COMM 1311	Written Communication	3		COMM 1312	Writing and Research	3	COMM 1311
MATH 1311	Finite Math. for Stu. of Busi.	3	PRPM 0012	UNIV 1212	Critical Thinking and Problem Solving	2	
UNIV 1211	Prof. Development and Competencies	2		MATH 1313	Statistical Methods	3	PRPM 0012
GEIT 1411	Computer Science I	4		GEIT 1412	Computer Science II	4	GEIT 1411
CSEC 1311	Intro to Cybersecurity	3		PHED 1112	Healthy Behaviors and Management	1	
PHED 1111	Active Living Lifestyle	1			Social Science Elective I*	3	
Total Credit Hours		18		Total Credit Hours		18	

SOPHOMORE YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course Number	Course Title	Credit Hours	Pre-requisite	Course Number	Course Title	Credit Hours	Pre-requisite
ALIS 2211	Linguistic Communication Skills	2		ALIS 2212	The Biography of Prophet Mohammad	2	
UNIV 1213	Leadership and Teamwork	2		COMM 2312	Technical and Professional Communications	3	COMM 2311
ASSE 2111	Learning Outcome Assessment I	1	<i>Sophomore Level</i>	GEIT 2331	Mathematical Reasoning & Algorithmic Thinking	3	GEIT 1412
GEIT 2421	Data Structures	4	GEIT 1412	CSEC 2331	Digital Forensics	3	GEIT 2291
CSEC 2431	Network Management	4	GEIT 1412	GEIT 3331	Computer Organization	3	GEIT 1412
GEIT 2291	Professional Ethics	2			Social Science Elective II*	3	
COMM 2311	Oral Communication	3	COMM 1312				
Total Credit Hours		18		Total Credit Hours		17	

JUNIOR YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course Number	Course Title	Credit Hours	Pre-requisite	Course Number	Course Title	Credit Hours	Pre-requisite
ASSE 3211	Learning Outcome Assessment II	2	ASSE 2111	CSEC 3352	Secure Software Engineering	3	GEIT 3351
GEIT 3341	Database I	3	GEIT 1412	CSEC 3432	Cyber Operations	4	CSEC 2431
CSEC 3431	Network Security	4	CSEC 2431	CSEC 3354	Intro. to Cryptography	3	GEIT 2421
GEIT 3351	Principles of Software Engineering	3	GEIT 1412		Natural Science Elective I**	4	
	CSEC Elective I***	3		CSEC 3355	Scripting Languages	3	GEIT1412
Total Credit Hours		15		Total Credit Hours		17	

SUMMER OF JUNIOR YEAR

Course Number	Course Title	Credit Hours		Pre-requisite
GEIT 4361	Internship	3	8 weeks (320 hours) full time	End of Junior Year (summer before graduation) and department approval

SENIOR YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course Number	Course Title	Credit Hours	Pre-requisite	Course Number	Course Title	Credit Hours	Pre-requisite
CSEC 4361	Operating Systems	3	GEIT 3331	CSEC 4471	Vulnerability and Penetration testing	4	CSEC 3355
CSEC 4362	Machine Learning	3	GEIT 2421	CSEC 4472	Systems Security	4	CSEC 4361
	CSEC Elective II***	3			CSEC Elective III***	3	
ASSE 4311 - CSEC	Assessment III - CSEC (Capstone)	3	ASSE 3211		Natural Science Elective II**	4	
Total Credit Hours		12		Total Credit Hours		15	

CYBERSECURITY PROGRAM TOTAL DEGREE CREDIT HOURS = 133

Electives:

*Social Science Electives		**Natural Science Electives	
FREN 1311	Introduction to French Language	BIOL1411	Introductory Biology
FURS 1311	Introduction to Futures Skills	CHEM1411	Introductory Chemistry
FUTR 1311	Introduction to Futures Studies	CHEM1421	Chemistry for Engineers I
GEGR 1311	World Regional Geography	CHEM1422	Chemistry for Engineers II
HIST 1311	World Civilizations	PHYS1411	Introductory Physics
PSYC 1311	Introduction to Psychology		
SERV 1311	Introduction to Service Learning and Volunteering		
SPAN 1311	Introduction to Spanish Language		
SUST 1311	Introduction to Sustainability		
SYST 1311	Introduction to Systems Thinking		

*** CSEC Electives (Tracks)

Course Code	Course Title	Pre-requisite	Course Code	Course Title	Pre-requisite
CSEC4362	Network Administration	CSEC4361 CSEC2431	ITAP4315	Cloud Computing	GEIT3331 CSEC2431
CSEC4363	Web Application Penetration Testing		ITAP3362	Mobile Applications Design and Development	GEIT3341
CSEC4364	ICS/SCADA Security Essentials		ITAP4390	Information Security and Assurance	CSEC4361 CSEC3431
CSEC4365	Critical Security Controls: Implementation and Auditing		ITAP4363	Systems Administration	CSEC4361 CSEC2431
CSEC4376	Secure e-Commerce	GEIT3331	ITAP4367	Database Administration	CSEC4361 GEIT3341
CSEC4393	Special Topics	OVER 90 CR			

