

# BACHELOR OF SCIENCE IN CYBERSECURITY

FRESHMAN YEAR											
FIRST SEMESTER						SECOND SEMESTER					
Course Number	Course Title	Credit Hours	Contact Hours		Pre-requisite	Course Number	Course Title	Credit Hours	Contact Hours		Pre-requisite
			Lec	Lab					Lec	Lab	
<b>ALIS 1211</b>	Introduction to Islamic Culture	2	2	0		<b>ALIS 1212</b>	The Social System in Islam	2	2	0	<i>ALIS 1211</i>
<b>COMM 1311</b>	Written Communication	3	3	0		<b>COMM 1312</b>	Writing and Research	3	3	0	<i>COMM 1311</i>
<b>MATH 1311</b>	Finite Math. for Stu. of Busi.	3	3	1	<i>PRPM 0012</i>	<b>UNIV 1212</b>	Critical Thinking and Problem Solving	2	2	0	<i>UNIV 1211</i>
<b>UNIV 1211</b>	Prof. Development and Competencies	2	2	0		<b>MATH 1313</b>	Statistical Methods	3	3	1	<i>PRPM 0012</i>
<b>GEIT 1411</b>	Computer Science I	4	3	2		<b>GEIT 1412</b>	Computer Science II	4	3	2	<i>GEIT 1411</i>
<b>CSEC 1311</b>	Intro to Cybersecurity	3	3	0		<b>PHED 1112</b>	Healthy Behaviors and Management	1	1	0	<i>PHED 1111</i>
<b>PHED 1111</b>	Active Living Lifestyle	1	1	0			Social Science Elective I*	3			<i>See from the list</i>
<b>Total Credit Hours</b>		<b>18</b>				<b>Total Credit Hours</b>		<b>18</b>			

SOPHOMORE YEAR											
FIRST SEMESTER						SECOND SEMESTER					
Course Number	Course Title	Credit Hours	Contact Hours		Pre-requisite	Course Number	Course Title	Credit Hours	Contact Hours		Pre-requisite
			Lec	Lab					Lec	Lab	
<b>ALIS 2211</b>	Linguistic Communication Skills	2	2	0	<i>ALIS 1212</i>	<b>ALIS 2212</b>	The Biography of Prophet Mohammad	2	2	0	<i>ALIS 2211</i>
<b>UNIV 1213</b>	Leadership and Teamwork	2	2	0	<i>UNIV 1212</i>	<b>COMM 2312</b>	Technical and Professional Communications	3	3	0	<i>COMM 2311</i>
<b>ASSE 2111</b>	Learning Outcome Assessment I	1	1	1	<i>Sophomore Standing</i>	<b>GEIT 2331</b>	Mathematical Reasoning & Algorithmic Thinking	3	3	0	<i>GEIT 1412</i>
<b>GEIT 2421</b>	Data Structures	4	3	2	<i>GEIT 1412</i>	<b>CSEC 2331</b>	Digital Forensics	3	3	0	<i>GEIT 2291</i>
<b>CSEC 2431</b>	Network Management	4	3	3	<i>GEIT 1412</i>	<b>GEIT 3331</b>	Computer Organization	3	3	0	<i>GEIT 1412</i>
<b>GEIT 2291</b>	Professional Ethics	2	2	0			Social Science Elective II*	3			<i>See from the list</i>
<b>COMM 2311</b>	Oral Communication	3	3	0	<i>COMM 1312</i>						
<b>Total Credit Hours</b>		<b>18</b>				<b>Total Credit Hours</b>		<b>17</b>			

JUNIOR YEAR											
FIRST SEMESTER						SECOND SEMESTER					
Course Number	Course Title	Credit Hours	Contact Hours		Pre-requisite	Course Number	Course Title	Credit Hours	Contact Hours		Pre-requisite
			Lec	Lab					Lec	Lab	
ASSE 3211	Learning Outcome Assessment II	2	2	1	ASSE 2111 & Junior Standing	CSEC 3352	Secure Software Engineering	3	3	0	GEIT 3351
GEIT 3341	Database I	3	2	2	GEIT 1412	CSEC 3432	Cyber Operations	4	3	2	CSEC 2431
CSEC 3431	Network Security	4	3	3	CSEC 2431	CSEC 3354	Intro. to Cryptography	3	3	0	GEIT 2421
GEIT 3351	Principles of Software Engineering	3	3	0	GEIT 1412	CSEC 3355	Scripting Languages	3	3	0	GEIT 1412
	CSEC Elective I***	3			See from the list		Natural Science Elective I**	4			See from the list
<b>Total Credit Hours</b>		<b>15</b>				<b>Total Credit Hours</b>		<b>17</b>			

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	Contact Hours		Pre-requisite	Course Number	Course Title	Credit Hours	Contact Hours		Pre-requisite
			Lec	Lab					Lec	Lab	
CSEC 4361	Operating Systems	3	3	0	GEIT 3331	CSEC 4471	Vulnerability and Penetration testing	4	3	2	CSEC 3355
CSEC 4362	Machine Learning	3	3	0	GEIT 2421	CSEC 4472	Systems Security	4	3	2	CSEC 4361
ASSE 4311	Learning Outcome Assessment III - CSEC	3	3	0	ASSE 3211 & Senior Standing		CSEC Elective III***	3			See from the list
	CSEC Elective II***	3			See from the list		Natural Science Elective II**	4			See from the list
<b>Total Credit Hours</b>		<b>12</b>				<b>Total Credit Hours</b>		<b>15</b>			

**CYBERSECURITY PROGRAM TOTAL DEGREE CREDIT HOURS = 133**

**\* Social Science Electives: 2 Courses = 6 Credit Hours**

Course Number	Course Title	Credit Hours	Pre-Requisites
FREN 1311	Introduction to French Language	3	
FURS 1311	Introduction to Futures Skills	3	
FUTR 1311	Introduction to Futures Studies	3	
GEGR 1311	World Regional Geography	3	
HIST 1311	World Civilizations	3	
PSYC 1311	Introduction to Psychology	3	
SERV 1311	Introduction to Service Learning and Volunteering	3	
SPAN 1311	Introduction to Spanish Language	3	
SUST 1311	Introduction to Sustainability	3	
SYST 1311	Introduction to Systems Thinking	3	
BSTW 1311	Behavioral Sciences in 3D World	3	
DANT 1311	Digital Anthropology	3	
ECON 1311	Introduction to Macroeconomics	3	
ECON 1312	Introduction to Microeconomics	3	

**\*\* Natural Science Electives: 2 Course = 8 Credit Hours**

Course Number	Course Title	Credit Hours	Contact Hours		Pre-requisite
			LEC	LAB	
BIOL 1411	Introductory Biology	4	3	3	PRPM 0011
CHEM 1411	Introductory Chemistry	4	3	3	PRPM 0011
PHYS 1411	Introductory Physics	4	3	3	PRPM 0011

**\*\*\* CSEC Electives: 3 Courses = 9 Credit Hours**

Course Number	Course Title	Credit Hours	Contact Hours		Pre-requisite
			LEC	LAB	
CSEC 4377	Network Administration	3	3	0	CSEC 4361 CSEC 2431
CSEC 4363	Web Application Penetration Testing	3	3	0	CSEC 3355
CSEC 4364	ICS/SCADA Security Essentials	3	3	0	CSEC 3355
CSEC 4365	Critical Security Controls: Implementation and Auditing	3	3	0	CSEC 3355
CSEC 4376	Secure E-Commerce	3	3	0	GEIT 3331
ITAP 4315	Cloud Computing	3	3	0	GEIT 3331 CSEC 2431
ITAP 4390	Information Security and Assurance	3	3	0	CSEC 4361 CSEC 3431
ITAP 4363	Systems Administration	3	3	0	CSEC 4361 CSEC 2431
ITAP 4367	Database Administration	3	3	0	CSEC 4361 GEIT 3341
CSEC 4393	Special Topics – I	3	3	0	Senior Standing & Department Approval
CSEC 4398	Special Topics – II	3	3	0	Senior Standing & Department Approval
CSEC 4399	Special Topics – III	3	3	0	Senior Standing & Department Approval