



Cybersecurity Track

First Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
ENGL 101	English Language –1	2		Required
COCS 100	Computer skills	3		Required
COCS 111	Introduction to Programming	3		Required
MATH 101	Calculus –1	3		Required
PHYS 101	General Physics –1	3		Required
STAT 101	Probability and Statistics	3		Required
Total Credit Hours			17	

Second Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
ENGL102	English Language –2	2	ENGL 101	Required
ISLM 100	Islamic Culture –1	2		Required
COCS 121	Computational Discrete Math	3	MATH 101	Required
COCS 122	Object Oriented Programming	4	COCS 111	Required
COCS 123	Introduction to Database	3	COCS 111	Required
MATH 211	Calculus –2	3	MATH 101	Required
Total Credit Hours			17	

Third Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
ENGL 201	Academic Writing	2	ENGL 102	Required
COCS 211	Data Structures	4	COCS 122	Required
COCS 212	Digital Logic Design	3	COCS 121	Required
MATH 221	Linear Algebra	3	MATH 101	Required
COCS 213	Computer Organization and Architecture	3	COCS 212	Required
COCS 214	Computer Ethics	2		Required
Total Credit Hours			17	



Fourth Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
C0CS 221	Visual Programming	3	C0CS 122	Required
C0CS 222	Design and Analysis of Algorithms	3	C0CS 211	Required
C0CS 223	Principles of Software Engineering	3	C0CS 122	Required
C0CS 224	Operating Systems	3	C0CS 313	Required
C0CS 226	Human Computer Interaction	3	C0CS 122	Required
C0CS 225	Computer Networks	3	C0CS 322	Required
Total Credit Hours			18	

Fifth Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
XXXX	Free Course –1	3		Required
C0CY 311	Cybersecurity Fundamentals	3	C0CS 211	Required
C0SY 312	System Administration	3		Required
C0CY 313	Cryptography	3	C0CS 212	Required
C0CS 314	Software project management	3	C0CS 322	Required
C0CY 315	IT Systems Security and Auditing	3	C0CS 324	Required
Total Credit Hours			18	

Sixth Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
C0CY 321	Information Security Management	3	C0CS 311	Required
C0CY 322	Software Security	3	C0CY422	Required
C0CY 323	Data security and privacy	3	C0CS 324	Required
C0CY 324	Network Security	3	C0CY 424	Required
Elec I	Elective Course –1	3		Elective
Total Credit Hours			15	



Seventh Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
XXXX	Free Course –2	3	COCS 411	Required
COCY 411	Mobile and wireless Communication Security	3		Required
COCY 412	Web Development and Security	3		Required
COCY 413	Cybersecurity Governance	3	COCY424	Required
Elec II	Elective Course –2	3		Elective
COCY 419	Project –1	2	COCY 411	Required
Total Credit Hours			17	

Eighth Level:

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
COCS 429	Project –2	3	COCY 419	Required
COCS 428	Internship	8	COCY 419	Required
Total Credit Hours			11	

Total Credit Hours: 130

List of elective courses

Course Code	Course Title	Credit Hours	Prerequisite	Course Type
COCY 431	Vulnerability Analysis and Testing	3	COCY 422	Elective
COCY 432	Advanced topics in Cybersecurity	3		Elective
COCY 433	Big Data Analytics	3	COCY 411	Elective
COCY 434	Computer Forensics	3	COCY 424	Elective
COCY 435	Reverse Engineering and Malware Analysis	3	COCY 423	Elective