Bachelor of Science in Cybersecurity Engineering
Study Plan (Fall Start)

Total Credit Hours: **135**

First Year (Freshman)

Semester 1

Code	Title	Cr	Prerequisite
ECT 200	Introduction to Computing	3	nil
ENG 200	English II	3	IELTS average score of 6 or EMSAT average score of 1400 or passing grade in ENG102
ARL101	Communication Skills in Arabic I	3	nil
ISL 100	Islamic Culture	3	nil
MTT 102	Calculus I	3	C grade in MTT 101 or MPT
STT 100	General Statistics	3	nil
	Total Credit Hours	**18**	

Semester 2

Code	Title Introduction	Cr.	Prerequisite
CSE 210	Introduction to Cybersecurity Engineering	3	ECT 200
PHY 102	Physics and Engineering Applications I	3	MTT 102
PHY 102 L	Physics and Engineering Applications I Lab	1	MTT 102 + PHY 102 (co-req)
MTT 200	Calculus II	3	MTT 102
FWS205	UAE and GCC Society	3	ENG102 (P) & USS001 as pre-requisite USS001 as co-requisite if students enter to ENG200 course directly course directly
COE 102	Introductory Big Data Analytics	3	STT 100
	Total Credit Hours	**16**	

Second Year (Sophomore)

Semester 3

Code	Title	Cr.	Prerequisite
SWE 201	Structured Programming	3	MTT 101 or Higher
MTT 202	Discrete Mathematics	3	STT 100
PHY 201	Physics and Engineering Applications II	3	PHY 102
PHY 201L	Physics and Engineering Applications II Lab	1	PHY 102 + PHY 201 (co-req)
STT 201	Intermediate Statistics and Research Methods	3	STT 100
OE 1	Open Elective 1	3	-
	Total Credit Hours	**16**	

Semester 4

Code	Title	Cr.	Prerequisite
CSC 202	Programming II	3	SWE 201 or CSC 201
CSC 302	Database Management Systems	3	MTT 202 + (SWE 201 or CSC 201)
CHE 205	General Chemistry I	3	Co) ENG 102/ENG200
CHE 201L	Chemistry Lab	1	CHE 205 (co-req)
FWS 305	Technical Communications for Workplace	3	ENG 200 + (Comp. of 45CH)
MTT 204	Introduction to Linear Algebra	3	MTT 200
	Total Credit Hours	**16**	

Summer Semester

Code	Title	Credit	Prerequisite
CSE 399A	Internship/Project in Cybersecurity: Part A	1.5	60 Credit Hours

Third Year (Junior)

Semester 5

Code	Title	Cr.	Prerequisite
CSC 301*	Data Structures and Algorithms	3	CSC 202 + MTT 202
CSC 305	Data Communications and Networks	3	Junior Level
CSC 303	Digital Logic Design	3	ECT 200
CSE 310	Introduction to Cryptography	3	STT 201 + MTT 202
ITE 390	Computer Ethics	3	CSC 202
FWS 310	Fundamentals of Innovation and Entrepreneurship	3	ENG 200 + (Comp. of 60CH)
	Total Credit Hours	**18**	

Semester 6

Code	Title	Cr.	Prerequisite
CSC 308	Operating Systems	3	CSC 301
CSE 300	Introduction to Digital Forensics	3	SWE 201 or CSC 201
CSC 307	Web Design	3	SWE 201 or CSC 201
CEN 325	Internet of Things: Foundation and Design	3	(SWE 201 or CSC 201) + CSC 303
ITE 421	Native Mobile Application Development	3	CSC 202
CSC 406	Artificial Intelligence	3	**STT 201 + CSC 301**
	Total Credit Hours	**18**	

Summer Semester

Code	Title	Credit	Prerequisite
CSE 399B	Internship/Project in Cybersecurity- Part B	1.5	90 Credit Hours

Fourth Year (Senior)

Semester 7

Code	Title	Cr.	Prerequisite
ITE 408	Information Security	3	CSC 305
CEN 425	Internet of Things: Applications and Networking	3	CEN325+(CEN333/ITE421)+CSC305 (co-req)
CSE 400	Network Security and Forensics	3	CSC 305
CSE 410	Mobile Device Security	3	CSC 305
CSE 499A	Capstone Project in Cybersecurity Engineering-Part A	1	**Senior Level**
ME 1	Major Elective I	3	-
	Total Credit Hours	**16**	

Semester 8

Code	Title	Cr.	Prerequisite
CSC 408	Distributed Information Systems	3	CSC 202 + CSC 305
CEN 445	Securing the Internet of Things	3	CEN 425
CSE 420	Ethical Hacking	3	CSC 305
CSE 499B	Capstone Project in Cybersecurity Engineering-Part B	2	CSE 499A
ME 2	Major Elective II	3	-
	Total Credit Hours	**14**	