#### **Program Structure**

The Bachelor of Science in Cybersecurity program requires the completion of 123 credit hours, which include the following courses:

Type of Courses	<b>Credit Hours</b>
1. General Education Requirements	
(a) University Compulsory Courses	18
(b) University Elective Courses	12
2. Cybersecurity Program Courses	
(a) Program Core Courses	84
(b) Program Elective Courses	9
Total Credit Hours	123

#### **Program Courses**

#### 1. General Education Courses

#### a. University Compulsory Courses (18 Cr. Hrs.)

Course No.	Course Title	Th.	Lab	Tut.	Cr. Hrs.	Prerequisit e
AUL100	Introduction to University Life	1	0	0	0	-
EMS112	Emirates Studies	3	0	0	3	-
ENG104	Advanced English Writing	3	0	0	3	-
ENG211	Public Speaking	3	0	0	3	-
THI212	Critical thinking and Quantitative Reasoning	3	0	0	3	
INN311	Innovation & Sustainable Entrepreneurship	3	0	0	3	60 Credit Hours
STA114	General Statistics	2	2	0	3	-

#### b. University Elective Courses (12 Cr. Hrs.)

	Course Code	Course Title	Th.	Lab.	Tut.	Cr. Hrs.	Prerequisite
1. Humanities / Arts (3 Credit Hours)							
	ART111	Introduction to Arts	3	0	0	3	-

COM103	Introduction to Film Studies	3	0	0	3	-
FRE211	Conversational French	3	0	0	3	-
HPS111	History and Philosophy of Science	3	0	0	3	-
ISL114	Islamic Culture	3	0	0	3	-
LAW106	Human Rights	3	0	0	3	-
WLT115	World Literature	3	0	0	3	-
	2. Natural Sciences (3 Ci	redit Ho	ours)			
AST211	Astronomy	3	0	0	3	-
BIO111	General Biology	2	2	0	3	-
CHM111	General Chemistry	2	2	0	3	-
ENV113	Science of Energy and Global Environment	3	0	0	3	-
FUT101	The Sciences of the Future	3	0	0	3	-
GEO102	Planet Earth	3	0	0	3	-
PHY111	General Physics	3	0	0	3	-
	3. Social or Behavioral Science	s (6 Cr	edit Ho	urs)		
COM102	Media Culture	3	0	0	3	-
CRM101	Introduction to Criminology	3	0	0	3	-
LAW112	Work Ethics	3	0	0	3	-
LED111	Leadership and Team Building	3	0	0	3	-
PSY111	General Psychology	3	0	0	3	-
SSW111	Social Responsibility	1	4	0	3	-

# 2. Cybersecurity Program Courses

### a. Program Core Courses (84 Cr. Hrs.)

		Cred	Wee	ekly Hours		
Course Number	Course Title	it Hour s	Lectur e	Lab	Tut	Prerequisite
CYB261	Cryptography	3	3	0	0	INT101, STA114

CYB311	Software Security	3	2	2	0	INT303, DAT100
CYB341	Networks Security	3	2	2	0	INT311, CYB261, INT303
CYB351	Cloud Computing Architecture and Security	3	2	2	0	INT303
CYB381	Cybersecurity Policies, Laws, Ethics, and Risk Management	3	3	0	0	INT303
CYB412	Malware Analysis	3	2	2	0	CYB311
CYB441	Network Defense	3	2	2	0	CYB341
CYB451	Security Analytics	3	2	2	0	CYB441
CYB452	Web Security	3	2	2	0	INT206, CYB341, INS305
CYB481	Digital Forensics	3	2	2	0	CYB412,CYB45 2
CYB491	Cybersecurity Capstone Project	3	1	4	0	Year 4
CYB492	Internship	3	3	0	0	Year 4
DAT100	Introduction to Data Analytics	3	2	2	0	INT100
INS305	Systems Analysis and Design	3	3	0	0	INT201
INT100	Introductory Programming	3	2	2	2	-
INT101	Calculus of Information Technology	3	3	0	2	-
INT201	Object Oriented Programming	3	2	2	2	INT 100
INT202	Discrete Mathematics	3	3	0	2	INT 101
INT203	Computer Organization	3	3	0	0	-
INT205	Fundamentals of Data Communication and Networking	3	2	2	0	INT 203 OR COE246
INT206	Fundamentals of Web Systems	3	2	2	2	INT201
INT209	Data Structures	3	3	0	2	INT201 and INT202
INT301	Operating Systems	3	2	2	0	INT203 OR COE246
INT302	Database Management Systems	3	2	2	0	INT201
INT303	Fundamentals of Information Security	3	3	0	0	INT205
INT311	Advanced Computer Networks	3	2	2	0	INT205
INT430	Artificial Intelligence	3	3	0	0	INT302
INT432	Ethical Hacking	3	2	2	0	CYB441, CYB452

## b. Program Elective Courses (9 Cr. Hrs.)

Course		Credi	Weekly Hours		rs	
Number	Course Title	Hour Lectur		Lab	Tut	Prerequisite
CYB321	Database Security	3	2	2	0	CYB261, INT302
CYB411	Cyberwarfare	3	3	0	0	INT303
CYB454	IoT security	3	3	0	0	CYB341
CYB455	Healthcare Security and Privacy	3	3	0	0	INT303
CYB456	Blockchain and Cryptocurrency Security	3	2	2	0	CYB261
CYB461	Advanced Cryptography	3	3	0	0	CYB261
CYB462	Introduction to Steganography	3	2	2	0	CYB261
CYB472	Operating Systems Security	3	2	2	0	INT301, INT303
CYB482	Advanced Ethical Hacking	3	2	2	0	INT432
CYB483	Artificial Intelligence Security	3	2	2	0	INT430, CYB451
CYB493	Special Topics in Cybersecurity	3	3	0	0	Completion of (60 CHs)
INT429	Mobile Applications	3	2	2	0	INT301, INT302