

# Curriculum

COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE
<b>General Education Requirements: 30 Credit Hours</b>					
ARL 100	Communication Skills in Arabic I	ENG 200	English II	FWS 305	Technical Communications for Work Place
ISL 100	Islamic Culture	MTT 102	Calculus I	FWS 211	Fundamentals of Emotional Intelligence
FWS 205	UAE and GCC Society	STT 100	General Statistics	FWS 100	Academic Skills for Success
FWS 310	Fundamentals of Innovation & Entrepreneurship				
<b>Degree Requirements: 57 Credit Hours</b>					
ECT 200	Introduction to Computing	CSE 210	Introduction to Cybersecurity Engineering	STT 201	Intermediate Statistics
MTT 200	Calculus II	MTT 202	Discrete Structures and applications	MTT 204	Introduction to Linear Algebra
PHY 102	Physics and Engineering Applications I	PHY 102L	Physics and Engineering Applications I Lab	PHY 201	Physics and Engineering Applications II
PHY 201L	Physics and Engineering Applications II Lab	CHE 205	General Chemistry I	CHE 201L	General Chemistry Lab
SWE 201	Structured Programming	CSC 202	Programming II	CSC 301	Data Structures and Algorithms
CSC 308	Operating systems	CSC 305	Data Communications and Networks	CSE 399	Internship/Project in Cybersecurity
ITE 421	Native Mobile Application Development	ITE 390	Computer Ethics	CSE 499A	Capstone Project in Cybersecurity Engineering-Part A
CSE 499B	Capstone Project in Cybersecurity Engineering-Part B				
<b>Major Requirements: 39 Credit Hours</b>					
CSC 307	Web Design	CSC 302	Database Management Systems	CSE 310	Introduction to Cryptography
ITE 408	Information Security	CSC 408	Distributed Information Systems	CSC 303	Digital Logic Design
CEN 325	Internet of Things: Foundation and Design	CEN 425	Internet of Things: Applications and Networking	CEN 445	Securing the Internet of Things
CSE 300	Introduction to Digital Forensics	CSE 400	Network Security and Forensics	CSE 410	Mobile Device Security
CSE 420	Ethical Hacking				
<b>Electives: 9 Credit Hours</b>					
ME 1	Major Elective I	ME 2	Major Elective II	OE 1	Open Elective I



## BACHELOR OF SCIENCE IN CYBERSECURITY ENGINEERING

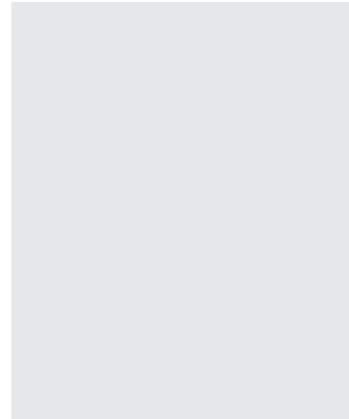


## Program Overview

Cybersecurity Engineering is an emerging field concerned primarily with the protection of computer systems from the theft of or damage to their hardware, software, or electronic data, as well as from the disruption or misdirection of the services they provide.

As a cybersecurity engineer, you will be able to contribute to the development of a cybersmart nation with secure and resilient online communication, as laid out by the National Electronic Security Authority (NESAs), the UAE Cybersecurity Council, and the Dubai Cybersecurity Strategy. Through this program, you will study courses on cryptography, network security, digital forensics, computer ethics, Internet of Things and mobile devices security, information security, and ethical hacking.

The program is the first undergraduate program in the region that is based on ABET engineering criteria and teaches cybersecurity within an engineering context.

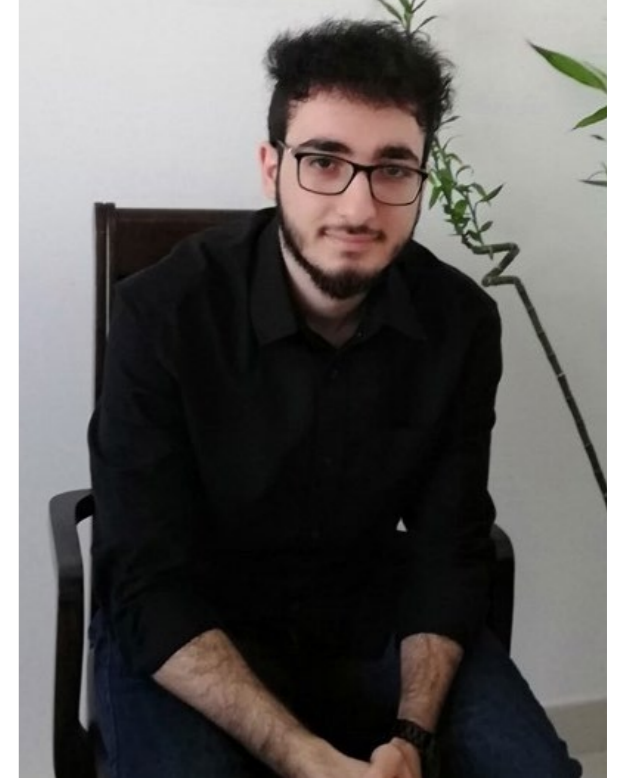


## Student's Testimonial

**I feel that I have attained a solid understanding of the foundations of my major**

**Obada Mhd Haitham Salman** - Bachelor of Science in Cybersecurity Engineering Student

As a Cybersecurity student in ADU, I feel that I have attained a solid understanding of the foundations of my major, which prepares me well to cope with such a rapidly growing field. The instructors were generous with their time and made sure that each class was effective and delivered information in a concise understandable way. The plethora of certificates, accreditations, and competitions that the university provides and encourages us to do helps cement the theoretical information we gathered into a much more practical sense. This builds our cybersecurity skills and makes us much more desirable candidates for future jobs.



## Career Prospects

In the digital age, almost every industry requires Cybersecurity Engineers. Cybersecurity experts are in high demand in the MENA region to fulfill a variety of roles, including the following:

- Cybersecurity Engineer
- IT security Engineer
- Network Security Engineer
- Security Systems Administrator
- Cybersecurity Architect
- Computer Forensic Expert
- IT Security Consultant
- Penetration Tester