

Faculty of Computers and Information Technology**Computers and Information Security****Information :****Course Code :** CSS312**Level :** Undergraduate**Course Hours :** 3.00- Hours**Department :** Cybersecurity Program**Instructor Information :**

Title	Name	Office hours
Lecturer	Hussein Mohamed Mohamed Ali Harb	
Lecturer	Mohamed Saeid Mohamed Shalaby	
Teaching Assistant	Ahmed Mohamed Nasr Abdel Latif El Dafrawy	
Teaching Assistant	Mona Mohamed Mohamed Ali Almakhton	

Description :

The course provides the basic principles of computer and information security. Topics covered in this course are cryptography: symmetric ciphers, asymmetric ciphers, MACs and hash functions, digital signatures, Cryptographic protocols: identification, authorization, authentication and key agreement, anonymity protocols, Fundamental concepts of access control models, threat modelling; hardware security, Usable security: basic human factors, warning design, phishing, device authentication, Security standards and protocols, virtual private networks, OS security: OS concepts, memory and file system, access control, file permissions, memory safety, stack-based buffer overflows, Malware: viruses, trojan horses, worms, rootkits, DNS attacks, Firewalls, Database security. Hands-on is provided through a series of exercises, assignments, and projects.