

**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
Associate Professor	HISHAM MOHAMED KORANY DAHSHAN	
Teaching Assistant	Donia Waleed Gamal Seddek Elsayed Hagag	
Teaching Assistant	Ahmed Samy El Saeed Ali Abo Ragab	

**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.