

**CENTER FOR APPLIED INFORMATION TECHNOLOGY  
TOWSON UNIVERSITY**

**AIT 614:** Network Security

**Credit Hours:** 3

**Prerequisite:** AIT 612

**Course Description:** This course will include the following topics: Network security, hacker attacks, virus attacks, web security, e-mail security, e-commerce security, systems and operation environment security, database security, algorithms for making data communications secure, encryption and coding techniques and IP security.

**Learning Objectives:**

1. Understand issues regarding networking and network security
2. To gain knowledge on ways that the security of a distributed information system can be protected and ways that it can be attacked
3. To acquire knowledge on various algorithms used to create secure network systems
4. To understand the hacker's domain and be able to protect the system against such attack
5. To gain understanding of a cyber attack and ways to deal with such attack

**Suggested Textbooks:**

1. Brenton, C. and Hunt, Cameron, *Mastering Network Security*, Second edition, Sybex
2. W. Stallings, *Network Security Essentials*, Third edition, Prentice Hall