

IT8303

## Computer Networking 3



**Course Aim** To introduce the core security concepts and skills needed for the installation, troubleshooting, and monitoring of network devices to maintain the integrity, confidentiality, and availability of data and services.

**Short Title**

**Faculty** Business

**Credits** 15

**Pre-requisites** IT7003 (ITB6003)

**Co-requisites** none

**Anti-requisites** none

**Version** 3

**Effective From** February 2016

**NQF Level** 8

**Student Contact hrs** 60

**Self-directed hrs** 60

**Other directed hrs** 30

**Total learning hrs** 150

**Learning**

**Outcomes**

- On successful completion of this course, students will be able to:
- 1 Describe the security threats facing modern network infrastructures.
  - 2 Secure network device access and implement AAA on network devices.
  - 3 Analyse threats and mitigate attacks to networks using various techniques.
  - 4 Design and implement secure network management and reporting, and administer effective security policies.
  - 5 Design and implement systems using the Cisco IOS firewall and IPS feature sets.
  - 6 Design and implement site-to-site IPSec VPNs.

**NQF Sub-strand**

Theoretical  
Understanding  
Practical  
Application of  
knowledge  
Practical  
Application of  
knowledge  
Generic, Problem  
Solving and  
Analytical Skills  
Practical  
Application of  
knowledge  
Practical  
Application of  
knowledge