1-Introduction to Network-security

- Threats and Network attacks

- Network Vulnerabilities

- Network Security Mechanism

2-Encryption in Network Security

- Link layer Encryption VS End-to-End Encryption

3-Control Network Access

- Type of Firewalls

- How to arrange Firewalls

4-Transmitted Data security

- IP security and IPSec protocol

- Virtual Private Networks (VPN)

- Security Principles in IPv6

5-Wireless Networks Security

- Wireless LAN Networks security

- WiMAX Networks Security

6-Transport Layer Security

- Principles of Web Security

- SSL and TLS protocols

- HTTPS protocol

- SSH protocol

7-Email Security

- PGP protocol

- S/MIME protocol

- DKIM protocol

8-Principles in NGN Networks

9-Network Analyzers System

- Intrusion Detection and Prevention Systems (IDS/IPS)

- Honeypots and Honeynets

10-Secure Network Architecture