

Network Security Technologies - Training Schedule

Day 1: Crypto / Security Algorithms

9.30 to 11.15 a.m

Introduction - Security requirements (CIA)

Crypto / Security Algorithms:

Symmetric key algorithms - DES, 3DES, AES

Block cipher modes - CBC, Counter modes

11.15 to 11.30 a.m - Tea Break

11.30 a.m to 1 p.m

Asymmetric key algorithms - RSA, DSA, DH

- ECC, EC-DH, EC-DSA

1 to 2 p.m – Lunch

2 to 3.30 p.m

Hash algorithms - MD5, SHA-1

Message Authentication Codes - HMAC (MD5/SHA-1)

3.30 to 4 p.m - Tea Break

4 to 5.30 p.m

PKI, PKCS, Digital Certificates (X.509)

Network Security Technologies - Training Schedule (contd.)

Day 2: Security Protocols

9.30 to 11.15 a.m

Wired security protocols:

Layer 3 security – IPSec (AH/ESP), IKEv1, IKEv2, ISAKMP

Transport Layer security - SSL/TLS

Virtual Private Networks (VPNs) – SSL VPNs, IPsec VPNs

11.15 to 11.30 a.m - Tea Break

11.30 to 1 p.m

SSH

Authentication / Access control – EAP, RADIUS, IEEE 802.1x

Firewalls, Intrusion Detection Systems (Snort)

1 to 2 p.m - Lunch

2 to 3.30 p.m

Wireless (Wi-Fi) security protocols:

WEP, WPA and 802.11i (WPA2)

EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-SIM etc.,

3.30 to 4 p.m - Tea Break

4 to 5.30 p.m

Multimedia security /Content protection protocols

SRTP, DTCP