Topics under Ethical Hacking & Cyber Security

Cyber Security & Ethical Hacking

Need of cyber security

Ethical hacking

Types of hackers

Penetration Testing

Footprinting

Footprinting techniques

Cryptography

Types of Cryptography

Symmetric / Asymmetric

Digital Signatures

Hash functions

Computer Networks & Security

Computer Network Architecture; Layered Architecture

OSI Model

TCP / IP Model

Common Network Threats

Application & Web Security

Web server architecture & attacks

Web client architecture & attacks

Counter measures & patch management

Identity & Access Management (IdAM)

Authentication

Authorization

IdAM

Password protection

Identity threats

Vulnerability Analysis (VA) & System Hacking

VA Types

VA Lifecycle

VA Tools

Vulnerability scoring system

VA Report

System Hacking
Password cracking
Privilege escalation, hiding files, clearing logs

Sniffing & SQL Injection

Malware & its types Sniffing attacks & its types SQL injection & its types

Denial of Service (DoS) & Session Hijacking

DoS attacks & symptoms
DoS detection
System Hijacking
Session / Application level hijacking
Intrusion Detection Systems (IDS) & types
Firewalls & Types
Honeypots
Evading IDS