

Ethical Hacking Syllabus

Module 1: 2 Hours - 3 Topics

- **Introduction: (Day 1)**
 - **What is Ethical Hacking**
 - **What are the different types of hackers**
 - **Five phases of hacking**
 - **Scope of Ethical Hacking**
- **Brush up Linux (Optional) (Day 1)**
- **Brush up networking (Optional) (Day 1)**

Module 2: 2 Hours - 3 Topics

- **Information Gathering: (Day 2)**
 - **Passive Information Gathering**
 - **Active Information Gathering**
 - **Five phases of hacking**
 - **Scope of Ethical Hacking**
- **Brush up Linux (Optional) (Day 2)**
- **Brush up networking (Optional) (Day 2)**

Module 3: 2 Hours - 1 Topic

- **Scanning (Day 3)**

Module 4: 2 Hours - 1 Topic

- **System Hacking: (Day 4)**
 - **Introduction to Metasploit Framework**
 - **Exploit MS17-010 Vulnerability**
 - **Reverse TCP Connection**

Module 5: 2 Hours - 1 Topic

- **System Hacking (Cont.): (Day 5)**
 - **Privilege Escalation using post exploit bypassuac and getsystem**
 - **Reverse connection in different network using port forwarding**
 - **Android hacking using reverse TCP connection**

Module 6: 2 Hours - 1 Topic

- **System Hacking (Cont) (Day 6)**
 - **Show software based vulnerabilities (Badblue/iceblaster)**

Module 7: 2 Hours - 1 Topic

- **System Hacking (cont) (Day 7)**
 - **Introduction to Active Directory**
 - **Explain OU, DC, TREE, FOREST**

- **Explain LDAP**
- **Explain how AD works**
- **Explain smb share**
- **Explain SPN**

Module 8: 2 Hours - 1 Topic

- **System Hacking (cont) (Day 8)**
 - **Introduction to Kerberos**
 - **Explain how Kerberos works (Authentication Server, Ticket Granting Server, TGT etc)**
 - **Explain Kerberoasting attack**
 - **Mention**
 - **ASREPROASTING**
 - **Golden Ticket**

Module 9: 2 Hours - 1 Topic

- **System Hacking (Cont.): (Day 9)**
 - **Malware (Different types of Malware, Virus and Trojan)**
 - **AV bypass**

Module 10: 2 Hours - 2 Topics

- **Sniffing using Wireshark (Day 10)**
- **Man In the Middle Attack using the concept of ARP poisoning (Day 10)**

Module 11: 2 Hours - 2 Topics

- **Cryptography (Day 11)**
 - **Symmetric Encryption Algorithm**
 - **Asymmetric Encryption Algorithm**
 - **Hash Algorithm**
- **Steganography (Day 11)**

Module 12: 2 Hours - 1 Topic

- **Wireless Attacks (Day 12)**
 - **Explain Wifi attacks (Deauth packets)**
 - **Explain Wifi 4 way handshake**
 - **Explain the attack scenario and procedure**
 - **Explain fake access point attacks**

Module 13: 2 Hours - 1 Topic

- **Website Attacks (Day 13)**

Module 14: 2 Hours - 1 Topic

- **Website Attacks(cont) (Day 14)**
 - **Explain XSS attacks**
 - **Explain different types of XSS attacks**

- **Prevention**

Module 15: 2 Hours - 1 Topic

- **Website Attacks(cont) (Day 15)**
 - **Explain sql injection attacks**
 - **Explain different kinds of sql injection attacks**
 - **error based**
 - **boolean based**
 - **union based**
 - **Mention: blind/time based**
 - **Prevention**

Module 16: 2 Hours - 1 Topic

- **Website Attacks (cont) (Day 16)**
 - **Explain CSRF attacks and prevention**
 - **Explain cookie stealing, session hijacking**
 - **Show a login brute force example**
 - **Talk about how to prevent such attacks**

Module 17: 2 Hours - 1 Topic

- **Website Attacks (cont) (Day 17)**
 - **Show data tampering attacks**
 - **Phishing Attack**
 - **File upload vulnerability**

Module 18: 2 Hours - 1 Topic

- **IOT Hacking (cont) (Day 18)**
 - **Explain various attack vectors in IOT hacking**

Module 19: 2 Hours - 2 Topics

- **DOS and DDOS attacks (Day 19)**
- **Cloud based attacks: (Day 19)**
 - **Explain cloud based attacks vectors**

Module 20: 2 Hours - 2 Topics

- **IDS (Day 20)**
- **IPS (Day 20)**