

# **Ethical Hacking Syllabus**

## **Introduction to Ethical Hacking**

- Key issues plaguing the information security world, incident management process, and penetration testing.

## **Footprinting and Reconnaissance**

- Various types of footprinting, footprinting tools, and countermeasures.

## **Scanning Networks**

- Network scanning techniques and scanning countermeasures.

## **Enumeration**

- Enumeration techniques and enumeration countermeasures.

## **Vulnerability Analysis**

- System hacking methodology, steganography, steganalysis attacks, and covering tracks.

## **System Hacking**

- Different types of Trojans, Trojan analysis, and Trojan countermeasures.

## **Malware Threats**

- Working of viruses, virus analysis, computer worms, malware analysis procedure, and countermeasures.

## **Social Engineering**

- Social Engineering techniques, identity theft, and social engineering countermeasures.

## **Denial-of-Service**

- DoS/DDoS attack techniques, botnets, DDoS attack tools, and DoS/DDoS countermeasures.

## **Session Hijacking**

- Session hijacking techniques and countermeasures.

## **Evading IDS, Firewalls, and Honeypots**

- Firewall, IDS and honeypot evasion techniques, evasion tools, and countermeasures.

## **Hacking Web Servers**

- Different types of web server attacks, attack methodology, and countermeasures.

## **Hacking Web Applications**

- Different types of web application attacks, web application hacking methodology, and countermeasures.

## **SQL Injection**

- SQL injection attacks and injection detection tools.

## **• Hacking Wireless Networks**

- Wireless Encryption, wireless hacking methodology, wireless hacking tools, and Wi-Fi security tools.

## **• Hacking Mobile Platforms**

- Mobile platform attack vector, android vulnerabilities, jailbreaking iOS, windows phone 8 vulnerabilities, mobile security guidelines, and tools.

## **• IoT Hacking**

- Different threats to IoT platforms and learn how to defend IoT devices securely.

## **Cloud Computing**

- Various cloud computing concepts, threats, attacks, and security techniques and tools.

## **Cryptography**

- Different types of cryptography ciphers, Public Key Infrastructure (PKI), cryptography attacks, and cryptanalysis tools.

## **• Security Operation Centre (SOC)**

## **• Security Information and Event Management (SIEM)**