

The curriculum provided is an extensive and comprehensive course on information security, covering a broad range of topics essential for understanding, detecting, and defending against various cyber threats. Here's an overview of each module:

1: INTRODUCTION TO INFORMATION SECURITY

- security elements
- cyber kill chain
- mitre att&ck framework
- ethical hacking
- information assurance
- risk management
- incident management
- laws and standards

2: FOOTPRINTING AND RECONNAISSANCE

- concepts
- osint + osr framework
- theharvester
- api keys
- foca + advanced google search + google hacking + whois footprinting + whois research + dns footprinting + query dns with nslookup + website footprinting + webserver fingerprint + id serve + httrack + email footprinting + email tracing + network footprinting + social network footprinting + countermeasures

3: SCANNING NETWORKS

- concepts
- discovery scans
- icmp echo
- arp pings
- host discovery
- angry ip scanner
- port scans
- angry ip scanner
- hping3 packet crafting
- zenmap
- nmap
- host discovery with nmap
- nmap version detection
- idle (zombie) scan
- ftp bounce scan
- nmap scripts
- firewall and ids evasion
- nmap advanced scans
- proxies

4: ENUMERATION

- smb netbios enumeration
- hyena
- file transfer enumeration
- wmi enumeration
- snmp enumeration
- softperfect
- ldap enumeration
- dns enumeration
- smtp enumeration
- remote connection enumeration
- website enumeration
- dirbuster

5: VULNERABILITY ANALYSIS

- cveq
- serianu
- vpat
- vulnerability scanning
- openvas
- vulnerability assessment
- risk profiling
- african trends

6: SYSTEM HACKING

concepts

- common os exploits
- buffer overflows
- tools and frameworks
- linux targets
- metasploit
- meterpreter
- keylogging and spyware
- netcat
- hacking windows
- eternal blue
- hacking linux
- password attacks
- pass the hash
- password spraying
- cracking tools
- windows password crack
- hiding data
- least significant bit steganography
- covering tracks

- clearing tracks in windows
- auditpol

7: MALWARE

- malware
- viruses
- trojans
- deploying a rat
- rootkits
- advanced persistent threat
- malware dropper and handler
- detection
- malware analysis
- static code review
- solarwinds orion hack

8: SNIFFING

- network sniffing
- sniffing tools
- sniffing http with wireshark
- capturing files from smb
- arp and mac attacks
- mitm attack with ettercap
- name resolution attacks
- spoofing responses with responder
- layer 2 attacks

9: SOCIAL ENGINEERING

- concepts
- techniques
- baited usb stick
- o.mg lightning cable
- phishing for credentials
- social media
- identity theft
- insider threats

10: DENIAL-OF-SERVICE

- dos-ddos concepts
- volumetric attacks
- fragmentation attacks
- state exhaustion
- application layer attacks

- loic attack
- hoic attack
- slowloris attack

11: SESSION HIJACKING

12: IDS, FIREWALLS, AND HONEYPOTS

13: WEB SERVERS

14: WEB APPLICATIONS

15: SQL INJECTION

16: WIRELESS NETWORKS

17: MOBILE AND IOT

18: CLOUD COMPUTING

19: CRYPTOGRAPHY

20: SOC AND INCIDENT RESPONSE