

CYBERSECURITY

FOUNDATION COURSE

A Social Endeavour to Make These Tough Times Easier

GAIN THE MOST WANTED SKILLS THAT ARE TOO TOUGH TO IGNORE BY EMPLOYERS

FREE BOOTCAMP | 64 HOURS | 32 DAYS

HIGHLIGHTS



64 Hours

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COURSE TOPICS & SCHEDULE

●	<i>NETWORKING BASICS</i>	<i>03</i>
●	<i>DEFENSIVE SECURITY BASICS</i>	<i>05</i>
●	<i>OFFENSIVE SECURITY BASICS</i>	<i>09</i>
●	<i>BASICS OF CLOUD COMPUTING</i>	<i>13</i>
●	<i>INFORMATION SECURITY MANAGEMENT</i>	<i>15</i>
●	<i>ISO 27001</i>	<i>16</i>
●	<i>Interview Preparation</i>	<i>16</i>



NETWORKING BASICS

DAY 01

- > What is Network?
- > Network types
- > Networking Models
- > Methods of data transmission

DAY 02

- > Introduction of OSI model
- > Understanding the flow of data through every layer
- > Protocols in every layer of OSI model



- > Types of network Media
- > Network topologies
- > Networking devices
- > TCP/IP protocol suite
- > IPv4 Addressing
- > IPv6 Introduction



- > Routing and Switching
 - > Dynamic and static routing
 - > Types of switching – circuit switching, packet switching, message switching
 - > Protocols in routing and switching



- > Basics of WAN
- > WAN transmission technologies
- > Network Troubleshooting tools
- > Overview of SDN



DEFENSIVE SECURITY BASICS

DAY
06

- › Cybersecurity vs Information security vs Privacy
- › CIA triad
- › Basic terminologies in security
- › Hackers and their types
- › Teams in Cybersecurity

DAY
07

- › Social Engineering
- › Types of social engineering attacks
- › Vulnerability Assessment
- › Types of Vulnerability Scanning



- > Cryptography an introduction
- > Basic terminologies in cryptography
- > Encryption and its types
- > Encodings
- > Digital signature
- > Digital Certificates
- > Public Key Infrastructure introduction
- > Certification authorities and certificate types
- > Certificate chaining



- > Network security Appliances
- > Firewall and its types
- > Security monitoring
- > SIEM summary
- > What is endpoint security
- > Endpoint security technologies – (EDR, XDR, MDR)



- > Introduction to packet analysis
- > Analyzing traffic using Wireshark
- > Mobile device security
- > Mobile device management and policies
- > Safety measures to follow for mobile device security



- > What is data privacy?
- > Types of data
- > Data privacy controls
- > Data privacy laws



- > Digital forensics introduction
- > Chain of custody
- > Order of volatility
- > Evidence Acquisition
- > Tools used in Digital Forensics



- > How Redundancy can increase availability?
- > Fault tolerance vs redundancy
- > Power redundancy
- > Disk Redundancy
- > Network redundancy
- > Backups and its types



- > Physical security in an Enterprise
- > Physical security controls
- > Air gaps
- > Safes and vault
- > HVAC, hot aisle and cold aisle



OFFENSIVE SECURITY BASICS

DAY
15

- › Introduction to Attacks
- › Introduction to penetration testing
- › Penetration testing methodologies
- › Why penetration testing is important for an organization?

DAY
16

- › Reconnaissance through search engines
- › Website Reconnaissance
- › The OSINT Framework
- › Introduction to scanning
- › Tools of scanning (nmap,nessus)



- > Working with nmap
- > Finding open ports, services running and service version with nmap
- > Banner grabbing
- > Scan beyond IDS and Firewall



- > Enumeration introduction
- > Introduction to the Metasploit framework
- > Enumerating different services using the Metasploit framework
- > Exploiting vulnerabilities to gain access



- > Privilege escalation introduction
- > Methods to escalate privileges
- > Covering the tracks by clearing logs
- > Covering tracks by Clearing the history
- > Clearing logs by removing log directory



- > Introduction to malware
- > Types of malware
- > Creating a malware
- > Intro to malware analysis



- > Sniffing
- > Types of Sniffing
- > Sniffing Techniques



- > Denial of Service attacks
- > Categories of DOS and DDOS
- > DDOS and bot-nets
- > DOS Tools
- > Countermeasures of DOS attack



- › Introduction to Wireless networks
- › Types of Wireless Encryption
- › Wireless hacking tools



- › Web application Basics
- › OWASP Top 10 2021 Introduction
- › Exploiting vulnerabilities of web application
- › Countermeasures of vulnerabilities
- › Secure coding practices



BASICS OF CLOUD COMPUTING



- › Introduction to Cloud computing
- › Advantages of cloud over on-premises
- › Limitations of cloud
- › Service models
- › Deployment models



- › Virtualization in cloud
- › Types of Hypervisors
- › Docker vs Container
- › Cloud service providers
- › Types of services provided by cloud
- › Get acquainted with cloud environment



- › Cloud storage security
- › Cloud networking security
- › VPC and Transit gateways
- › Introduction to AWS infrastructure
- › Security groups in AWS
- › Serverless architecture
- › EC2
- › S3 buckets
- › AWS Infrastructure

INFORMATION SECURITY MANAGEMENT



- > Introduction to Information Security Management
- > Access Controls
- > Security Policies



- > Overview of Incident Response Process
- > Risk Management



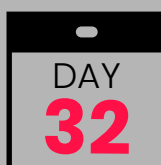
ISO 27001



- > What is ISO?
- > The ISO/IEC 27000 family of standards
- > Advantages of ISO/IEC 27001



- > Certification process
- > Certification bodies
- > Fundamental concepts and principles of information security



> Interview Preparation