

## Cybersecurity & Ethical Hacking (Job-Ready Course)

### SECTION 1: Cybersecurity Foundations

What you will learn:

- Cybersecurity principles
- CIA triad & threat landscape
- Linux & Windows basics
- Networking fundamentals
- Virtual lab setup

Minor Projects:

- Linux Lab
- Network Scanner

Major Projects:

- Secure Lab Environment

### SECTION 2: Networking & Reconnaissance

What you will learn:

- TCP/IP & OSI
- Nmap
- DNS & WHOIS
- Wireshark
- OSINT

Minor Projects:

- Port Scan
- Packet Analysis

Major Projects:

- Enterprise Recon Report

### SECTION 3: Web Security

What you will learn:

- HTTP/HTTPS
- OWASP Top 10
- Burp Suite

- Authentication flaws
- Secure coding basics

Minor Projects:

- XSS Demo
- SQLi Lab

Major Projects:

- Web App Security Assessment

## **SECTION 4: System Exploitation**

What you will learn:

- Vulnerability assessment
- Metasploit
- Privilege escalation
- Password attacks
- Windows/Linux exploitation

Minor Projects:

- Metasploit Lab
- Hash Cracking

Major Projects:

- Multi-stage Exploitation

## **SECTION 5: Wireless & Network Security**

What you will learn:

- Wi-Fi security
- Firewalls
- VPNs
- IDS/IPS
- Network hardening

Minor Projects:

- Firewall Config
- WiFi Audit

Major Projects:

- Network Hardening Project

## SECTION 6: Scripting & Automation

What you will learn:

- Python for security
- Bash scripting
- Automation
- Log analysis
- API basics

Minor Projects:

- Log Parser
- Automation Script

Major Projects:

- Security Automation Toolkit

## SECTION 7: Career & Capstone

What you will learn:

- CTF practice
- Bug bounty basics
- Portfolio
- Resume
- Interview prep

Minor Projects:

- CTF Challenge
- Pentest Report

Major Projects:

- End-to-End Penetration Test

## Technologies & Tools Covered

- Kali Linux
- Nmap

- Wireshark
- Burp Suite
- Metasploit
- OWASP ZAP
- John the Ripper
- Hydra
- Python
- Bash
- Git & GitHub
- Docker
- VirtualBox
- Windows
- Linux