



# Roadmap



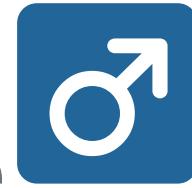
# Module 1:

# Introduction & Basics

- What is Cyber Security?
- Roadmap to Cyber Security
- Types of Cyber Attacks
- CIA Triad (Confidentiality, Integrity, Availability)
- DAD Triad (Disclosure, Alteration, Denial)
- Parkerian Hexad
- Basic Networking Concepts for Cyber Security
- Understanding TCP/IP Model for Cyber Security
- Introduction to Cryptography

# Module 2: Essential Tools & Environment Setup

- Setting Up Your Cyber Security Lab
- Introduction to Kali Linux & Commands
- Top 10 Tools Every Beginner Must Know
- How to Use Proxchains, VPN & TOR for Anonymity
- Wireshark for Packet Analysis



# Module 3: Ethical Hacking Fundamentals

- What is Ethical Hacking? Types of Hackers
- Phases of Ethical Hacking
- Information Gathering Techniques
- Scanning Networks with Nmap
- Vulnerability Scanning

# **Module 4:**

# **Web Application Security**

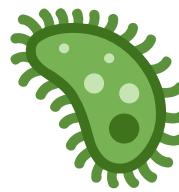
- Introduction to Web Security & OWASP Top 10
- SQL Injection Explained with Examples
- Cross Site Scripting (XSS)
- Cross Site Request Forgery (CSRF)
- Broken Authentication & Session Hijacking
- Insecure File Uploads & Path Traversal
- Burp Suite Basics for Web Pentesting



# Module 5:

# Wireless & Network Security

- Wi-Fi Security
- How Hackers Crack Wi-Fi Passwords
- MITM Attacks (Man in the Middle)
- DNS Spoofing & ARP Poisoning
- Sniffing Passwords with Wireshark



# Module 6:

# System & Malware Security

- Windows Security
- Linux Security
- Introduction to Malware
- Malware Analysis (Static vs Dynamic)
- Ransomware Explained



# Module 7:

# Advanced Topics

- Social Engineering Attacks
- Password Cracking Tools & Techniques
- Privilege Escalation (Windows & Linux)
- Exploitation Basics with Metasploit Framework
- Reverse Shells & Bind Shells Explained
- Exploiting Vulnerable Machines
- Reverse Engineering
- Cybersecurity Kill Chain & MITRE ATT\&CK Framework
- Introduction to Threat Modeling



# Module 8:

# Blue Team (Defense)

- Incident Response
- SIEM Tools
- SOAR Tools
- Threat Intelligence Platforms
- Firewall & IDS/IPS
- Endpoint Security & EDR Tools

# Module 9: Cloud & Modern Security

- Introduction to Cloud Security
- Common Cloud Threats & Misconfigurations
- Container Security
- Zero Trust Security Model
- Cyber Security in AI & IoT Era



# Module 10:

# Career & Job-Ready Path

- Cyber Security Certifications Roadmap
- Resume Building for Cyber Security Jobs
- Interview Preparation (Most Asked Questions)