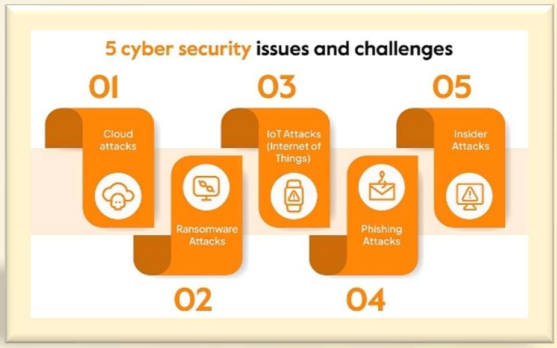
An ISO 9001:2015 Certified Organization

दिल्ली सरकार द्वारा मान्यता प्राप्त

# CYBER SECURITY & ETHICAL HACKING-

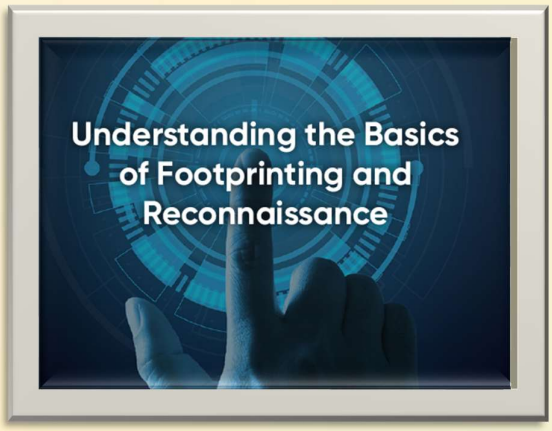
# 12 MONTHS




**Module 1: Introduction to Cyber Security**
What is Cyber Security? CIA Triad
Types of Hackers (White/Black/Grey Hat)
Cyber Crimes and Threat Landscape
Ethics and Laws (IT Act, GDPR, etc.)
Basics of Digital Footprint & Anonymity

**Module 2: Networking & Security Basics**
OSI & TCP/IP Models
IP Addressing, Subnetting
Ports & Protocols (TCP/UDP, DNS, HTTP/S, FTP, SSH)
Network Devices & Firewalls
Packet Flow & Sniffing Basics

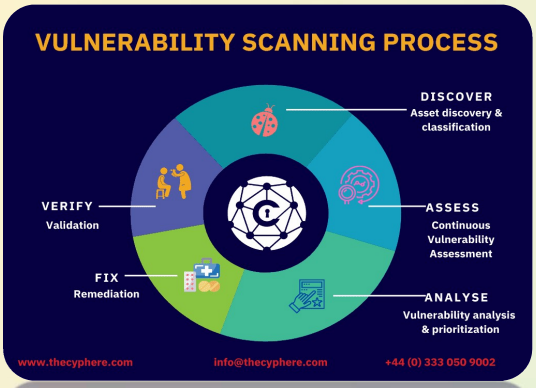
**Module 3: Linux & Windows OS for Hackers**
Basic & Intermediate Linux Commands
File system, permissions, bash scripting
Windows OS Internals: Registry, Services, Task Manager
User accounts & privilege escalation




**Module 4: Footprinting & Reconnaissance**
Passive vs Active Recon
WHOIS, DNS Enumeration
Shodan, Maltego
Social Engineering Basics
OSINT (Open Source Intelligence)

**Module 5:** Scanning: Port, Network, and Service
Banner Grabbing
Vulnerability Scanning
CVEs and CVSS

**Module 6: Gaining Access – System Hacking**
Password Cracking (Hashing, Brute Force, Rainbow Tables)
Trojans, Backdoors, Keyloggers
Privilege Escalation (Linux/Windows)
Hiding Tracks and Clearing Logs




**Module 7: Web Application Hacking**
OWASP Top 10 Vulnerabilities:
SQLi, XSS, CSRF, File Inclusion, Authentication Bypass
Web Shells & Backdoors
Exploiting Admin Panels
Secure Coding Guidelines (overview)

**Module 8: Wireless Network Hacking**
Wi-Fi Encryption: WEP, WPA, WPA2, WPA3
Packet Capturing & Decryption
Evil Twin Attack
MITM (Man-in-the-Middle) Attacks
Deauthentication Attacks

**Module 9: Metasploit & Exploitation Frameworks**


Introduction to Metasploit
Exploit & Payload Creation
Meterpreter Sessions
Post-Exploitation
Creating Custom Payloads
Module 10: Malware Analysis & Reverse Engineering (Month 10)
Types of Malware: Virus, Worm, Ransomware, Rootkits
Static vs Dynamic Malware Analysis
PE File Analysis
Sandboxing, Emulation, Debugging
Module 11: Digital Forensics & Incident Response
What is DFIR?
Data Acquisition & Imaging
Log Analysis
Timeline & Evidence Preservation
Chain of Custody
Incident Handling Lifecycle


**Module 12: Cloud, Mobile & IoT Security + Final Projects**
Cloud Security (AWS Basics, Shared Responsibility Model)
Mobile App Hacking (Android basics)
IoT Devices – Risks and Vulnerabilities
Final Project: Penetration Test Report
Career Guidance & Certification Prep