



# Cyber Space Security Expert

Module	Topics Covered	Duration
Module 01: Introduction	Basics of Networking Basics of Cybersecurity Cyber Threats Overview Cybersecurity Terminology Importance of Cyber Defense	2 weeks
Module 02: Social Engineering & Footprinting	Concept: Social Engineering & Footprinting Techniques: Identify Theft, Social Engineer Counter Measures Concept: Footprinting Types: Web, Email, Network, Social Media Footprinting Tools: Footprinting Tools Counter Measures: Footprinting Counter Measures	2 weeks
Module 03: Vulnerability Analysis & Sniffing	Concept: Vulnerability Analysis & Sniffing Types: Vulnerability Assessment Tools: Assessment Tools Reports: Assessment Reports Concept: Sniffing Types: MAC & DHCP Sniffing, ARP & DNS Poisoning, Spoofing Attacks Tools: Sniffing Tools Counter Measures: Sniffing Counter Measures	3 weeks
Module 04: System Security	Concepts: Privilege Escalation, Gaining Access, Maintaining Access, Clearing Logs Tools: System Security Tools Counter Measures: System Security Counter Measures	2 weeks
Module 05: Network Security	Concept: Network Security Tools: Scanning Tools, Host & Port Discovery Techniques: IDS & Firewall Scanning, Fingerprinting Counter Measures: Network Security Counter Measures	2 weeks
Module 06: Wireless Security	Concept: Wireless Security Techniques: Wireless Encryption, Security Threats Tools: Bluetooth & Wi-Fi Security Tools Counter Measures: Wireless Security Counter Measures	2 weeks
Module 07: Web Security	Concept: Web Security Threats: Server Security Threats Management: Server Security Management Counter Measures: Web Security Counter Measures	2 weeks
Module 08: Mobile Security	Threats: Mobile Platform Threats, Android OS Threats, iOS Threats Solutions: MDM Solutions	2 weeks





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Module 09: IoT & OT Security	Concept: IoT & OT Security Threats: IoT Threats, OT Threats Counter Measures: IoT & OT Security Counter Measures	2 weeks
Module 10: Malware Analysis	Concept: Malware Types: APT, Virus, Worm, Trojan, Fileless Attack Threats Techniques: SQL Injection Tools: SQL Tools, Antimalware Software Techniques: Evasion Techniques Counter Measures: Malware Counter Measures	2 weeks
Module 11: Cloud Security	Concept: Cloud Security Technologies: Cloud Technology Techniques: Cloud Security	1 week
Module 12: Threat Detection & Incident Response	Concepts: Security Operation Centre, Security Information & Event Management Tools: Endpoint Detection and Response, Extended Endpoint Response Techniques: Ransomware Detection, Threat Detection, Incident Response	2 weeks
Module 13: Cryptography	Concept: Cryptography Algorithms: Crypto Algorithms Tools: Crypto Tools Concepts: Public Key Infrastructure, Email Encryption, Communication Encryption, Crypto Analysis	2 weeks
Module 14: Cyber Defence	Tools: SMC & SMC Lite, Secure Gateway, xFirewall, Endpoint Security, Secure Communication, VPN Technology, Enterprise Messenger	3 weeks

