

Cyber Security

Month 1: Fundamentals and Ethical Hacking

Week 1: Introduction to Cyber Security

- Overview of Cyber Security
- Importance of Cyber Security in modern society

Week 2-3: Networking Basics and Operating System Security

- Basics of networking and the OSI model
- TCP/IP fundamentals
- Operating system security (Windows and Linux)

Week 4-5: Introduction to Ethical Hacking

- Understanding ethical hacking
- Overview of penetration testing
- Information gathering and footprinting

Week 6: Scanning and Enumeration

- Network scanning techniques
- Enumerating systems and services

Month 2: Network Security and Web Application Security

Week 1-2: Firewalls, IDS, and VPNs

- Configuring firewalls
- Implementing intrusion detection and prevention systems
- Introduction to Virtual Private Networks (VPNs)

Week 3-4: Wireless Security and Web Application Security

- Securing wireless networks
- Wi-Fi vulnerabilities and countermeasures
- Common web application vulnerabilities

Week 5-6: Incident Response and Legal Aspects

- Preparing for and responding to security incidents
- Legal and ethical aspects of Cyber Security
- Cybersecurity laws and regulations