

CODELYNX EDUCATION

CYBER SECURITY SYLLABUS (2026)

1. Computer & Networking Fundamentals

- Introduction to Cyber Security
- Types of Cyber Threats
- Computer Network Basics
- Types of Networks (LAN, MAN, WAN)
- Network Devices (Router, Switch, Firewall)
- TCP/IP Model
- IP Addressing
- DNS & HTTP

2. Operating System Security

- Windows Security Basics
- Linux Fundamentals
- Linux Commands
- File Permissions
- User Management
- Introduction to Kali Linux

3. Ethical Hacking Basics

- Ethical Hacking Concepts
- Foot printing
- Scanning Networks
- Enumeration
- Vulnerability Assessment

Tools

- NMAP
- WHOIS
- NETSTAT

4. Web Security & Attacks

- Web Application Security
- SQL Injection
- Cross Site Scripting (XSS)

- Authentication Attacks
- Website Vulnerability Testing

Tools

- Burp Suite
- OWASP ZAP

5. Security Tools & Malware

- Malware Types
- Virus / Trojan / Ransom ware
- Network Sniffing
- Password Cracking Basics
- Wireless Security

Tools

- WIRESHARK
- METASPLOIT
- AIRCRACK-NG

6. Cyber Security Management

- Incident Response
- Cyber Security Monitoring
- Risk Management
- Security Policies
- Security Awareness
- Digital Forensics Basics

Final Project-

1-Packet Analysis

2-Website Vulnerability Testing

