ETHICAL HACKING INTERNSHIP PROGRAM

This ethical hacking internship course for beginners typically covers a range of topics to provide a solid foundation in cybersecurity and ethical hacking techniques

COURSE OUTLINE

Week 1: Introduction to Ethical Hacking

- ≈ Understanding the basics of ethical hacking
- ≈ Differentiating between ethical hacking and malicious hacking
- ≈ Legal and ethical considerations in ethical hacking
- ≈ Introduction to common tools used in ethical hacking

Week 2: Information Gathering

- ≈ Techniques for gathering information about a target
- ≈ Using search engines and social engineering for information gathering
- ≈ Introduction to reconnaissance tools such as Nmap and Shodan
- ≈ Hands-on exercises on information gathering

Week 3: Scanning and Enumeration

- ≈ Understanding network scanning techniques
- ≈ Port scanning with tools like Nmap
- ≈ Service enumeration and version detection
- ≈ Hands-on exercises on scanning and enumeration

Week 4: Vulnerability Assessment

- ≈ Identifying vulnerabilities in systems and networks

- ≈ Using vulnerability scanners like OpenVAS and Nessus

- ≈ Manual vulnerability assessment techniques

- ≈ Hands-on exercises on vulnerability assessment

Week 5: Exploitation

- ≈ Understanding common exploits and attack vectors

- ≈ Exploiting vulnerabilities found during assessment

- ≈ Introduction to exploitation frameworks like Metasploit

- ≈ Hands-on exercises on exploitation

Week 6: Post-Exploitation

- ≈ Maintaining access to compromised systems

- ≈ Privilege escalation techniques

- ≈ Data exfiltration methods

- ≈ Hands-on exercises on post-exploitation

Week 7: Web Application Security

- ≈ Introduction to web application vulnerabilities

- ≈ Common web application attacks such as SQL injection, XSS, and CSRF

- ≈ Using tools like Burp Suite for web application testing

- ≈ Hands-on exercises on web application security

Week 8: Wireless Network Security

- ≈ Understanding wireless network vulnerabilities

- ≈ Wireless network scanning and enumeration

- ≈ Common attacks on wireless networks (e.g., WEP/WPA/WPA2 cracking)

- ≈ Hands-on exercises on wireless network security

Week 9: Social Engineering

- ≈ Understanding social engineering techniques

- ≈ Phishing attacks and email spoofing

- ≈ Pretexting and baiting

- ≈ Hands-on exercises on social engineering

Week 10: Reporting and Ethics

- ≈ Writing professional and comprehensive penetration testing reports

- ≈ Legal and ethical considerations in reporting vulnerabilities

- ≈ Guidelines for responsible disclosure

- ≈ Ethical hacking certifications and career paths