



American Certified Ethical Hacker

ETHICAL HACKING & PENETRATION TESTING

SYLLABUS & CONTENTS

Certified and Approved by American Board of Education



This course covers the fundamental principles and techniques of ethical hacking and penetration testing. Students will gain practical knowledge of security vulnerabilities, attacks, and defenses. Students will also learn the proper methodology and tools to conduct a security assessment and penetration testing.

- Understand the principles of ethical hacking and penetration testing
- Develop skills in identifying and exploiting security vulnerabilities
- Learn how to properly conduct a security assessment and penetration testing
- Gain practical knowledge of security tools and techniques



COURSE SYLLABUS

1. Introduction to Ethical Hacking

- Overview of Ethical Hacking
- Ethics and Legal Issues
- Different Types of Hacking
- The Hacking Methodology

2. Footprinting and Reconnaissance

- Gathering Information about the Target
- Scanning and Enumeration
- OS and Application Fingerprinting
- Social Engineering

3. Scanning and Enumeration

- Network Scanning
- Port Scanning and Service Enumeration
- Vulnerability Scanning

4. System Hacking

- Exploiting Operating System and Application Vulnerabilities
- Password Cracking Techniques
- Privilege Escalation Techniques

5. Web Application Hacking

- Web Application Architecture and Security
- OWASP Top 10 Vulnerabilities
- Web Application Scanning and Exploitation

6. Wireless Network Hacking

- Wireless Network Fundamentals
- Wireless Security

- Wireless Network Penetration Testing

7. Social Engineering

- Overview of Social Engineering
- Pretexting, Phishing, and Baiting
- Social Engineering Countermeasures

8. Cryptography

- Introduction to Cryptography
- Symmetric and Asymmetric Cryptography
- Public Key Infrastructure (PKI)
- Cryptography Attacks and Countermeasures

9. Penetration Testing

- Penetration Testing Fundamentals
- Penetration Testing Methodology
- Reporting and Documentation

10. Cybersecurity Law and Ethics

- Overview of Cybersecurity Law and Ethics
- Legal and Regulatory Compliance
- Ethical Considerations in Penetration Testing





Assessment and Evaluation:

- Quizzes and exams
- Class participation and discussion
- Assignments and Projects
- Final Project (Penetration Testing Report)

100% Placement Support and Interview Grooming



+91 97786 32484
+91 79073 58458



support@metalearn.com
www.metalearn.com

Metalearn, 55/523, 2nd Floor, K.K. Buildings,
Thoundayil Rd, Manorama Junction,
Panampilly Nagar, Ernakulam, Kerala 682036

