



(A Venture of Chandigarh ETC Services Pvt. Ltd.)

An ISO 9001:2015 Certified Organisation with Completely Online Management System

Website : www.citcchandigarh.com

Course Syllabus: Diploma in Ethical Hacking

Batch Name: DEH

Eligibility: 12th

Course Start: 1st of Every Month

Course Duration: 180 Hours

Courses / Modules Paper

Module

Paper 1

Ethical Hacking

Paper 1:

Ethical Hacking

1: Introduction to Ethical Hacking

- 1.1 What is Ethical Hacking
- 1.2 Types of Hacking
- 1.3 Phases of Ethical Hacking

2: Footprinting & Reconnaissance

- 2.1 Introduction
- 2.2 Domain Name Information
- 2.3 Finding IP Address
- 2.4 Finding Hosting Company
- 2.5 IP Address Ranges
- 2.6 History of Website
- 2.7 Fingerprinting
- 2.8 Basic steps
- 2.9 Port Scanning
- 2.10 Ping Sweep
- 2.11 DNS Enumeration

3: System Hacking

- 3.1 Introduction
- 3.2 How to perform?
- 3.3 Linux System Hacking
- 3.4 Window Hacking
- 3.5 Human Precaution Against System Hacking

4: Scanning Techniques

- 4.1 Introduction
- 4.2 Objectives
- 4.3 Scanning Methodologies
- 4.4 Port Scanning
- 4.5 TCP/IP Handshake
- 4.6 Tools & Steps

5: Enumeration

- 5.1 Introduction
- 5.2 Types of Enumerations
- 5.3 Techniques of Enumeration
- 5.4 Services and Port to Enumerate

6: Denial o Service

- 6.1 Introduction
- 6.2 How it works?
- 6.3 Historical Significant of DoS attacks
- 6.4 How to identify?
- 6.5 Difference b/w Ddos and DOS attack

7: Session Hacking

- 7.1 Introduction
- 7.2 Ways of Session Hacking
- 7.3 Mitigation

8: Sniffing

- 8.1 Introduction
- 8.2 What can be sniffed?
- 8.3 How it Works
- 8.4 Types of Sniffing
- 8.5 Hardware Protocol Analyzers
- 8.6 Lawful Interception

9: Social Engineering

- 9.1 Introduction
- 9.2 Human Based Attack
- 9.3 Reasons

10: Hacking Web servers

- 10.1 Introduction
- 10.2 Web Server Attacks Types
 - DOS Attack
 - Website Defacement
 - Dictionary Traversal
 - Misconfiguration attacks
 - Phishing Attacks
 - Methodology
 - Vulnerability Scanning
 - Password Attacks
 - Countermeasures

11: Hacking Web Applications

- 11.1 Introduction
- 11.2 Attacks
 - Parameter Tampering
 - Unvalidated Inputs
 - Directory Traversal Attack

12: Hacking Mobile Applications

- 11.1 Introduction
- 11.2 Tools

13: SQL Injection

- 13.1 Introduction
- 13.2 SQL in Web Pages
- 13.3 Use of SQL Parameters for Protection

14: Hacking Wireless Network

- 14.1 Introduction
- 14.2 Important terms

- Access Point
- SSID
- BSSID
- Bandwidth

- 14.3 Authentication

- Open Authentication
- Shared Key Authentication Process
- Centralised Authentication

15: Cryptography

- 15.1 Introduction
- 15.2 Origin of Cryptography
- 15.3 Types of Cryptography
- 15.4 Attacks of Cryptography
- 15.5 Tools of Cryptography