

# Kyrion EHIS Workshop Curriculum

Course Duration – 16 hours (Will be covered in 2 days, 8 hours)

## Concept of Ethical Hacking

- **Reading the Hacker's mind and Understanding the hacking psychology and methodology**
  - Introduction to Hacking
  - Real Meaning of Hacking v/s Public Perspective
  - Difference between Hacker and Cracker
  - Categories of Hackers: Based on Knowledge
  - Categories of Hackers: Based on Actions
  - Hactivism and Cyber Terrorism
  - Why Hackers Hack?
  - Steps performed by Hackers
- **Ethical Hacking and Penetration Testing**
  - Introduction to Penetration Testing
  - Difference between Hacking and Ethical Hacking
  - Types of Penetration Testing
  - Steps in Penetration Testing

## Email Hacking

- **Email Servers**
  - What is an Email Server?
  - How to Setup an Email Server?
  - Configuring the Email Server
  - Sending and Receiving Emails from your Email Server
- **Email Forgery and Spamming**
  - Introduction to Email Forgery
  - Types of Email Forgery
  - Fake mail sending websites
  - PHP Fake Mail Scripts
  - Email Spamming and Email Bombing
- **Email Password Attacks**
  - Email password attack vectors
  - Cracking the Password using the Fake Websites
  - Recovering the Email Password: Stealing the Cookies
  - IE Asterisks Revealer
- **Email Account Security**
  - Email Header Analysis
  - Tracing the Email path and Locating the Original Sender of the Email
  - Spam Filtering
  - Blacklisting Servers and Emails
  - Configuring the Email Account Recovery options

## Windows Hacking and Security

- **Windows System Architecture**
  - Windows Security Components
  - User Account Login Process
  - Windows Group Policy Editor
  - Syskey File Encryption
  - Windows Registry Structure
- **Targeting a Windows System**
  - Bypassing the Windows Login Screen: Live Cracking Disk
  - Recovering the User Accounts Passwords: Rainbow Tables
  - Cracking Windows password using the Bruteforce technique
  - Adding a Hidden User Account in Windows
  - Creating a Backdoor to Bypass the Login Screen
  - Disabling the Syskey Encryption
  - Windows Registry Hacks
  - Running a Keylogger in Windows
- **Windows System Security**
  - Configuring Strong Passwords
  - Restricting Access to Files and Folders
  - Change the Boot sequence in the BIOS
  - Steganography: Hiding Data behind Images
  - Hiding files and Encrypting data on the Hard Disk with a password
  - Detecting the Keylogger on a Local Computer

## Trojans

- **Concept of Trojan**
  - Introduction to Trojans
  - Different types of Trojans
  - Some Famous Trojans
- **Controlling Trojans**
  - Configuring a Server Trojan
  - Modes of Transmission
  - Remote Administration of Victim Computer
- **Trojan Evading and Countermeasures**
  - Detecting the running server
  - Tracing the Attacker
  - Killing the Trojan Server
  - Configuring the Windows Firewall

## Web Server as a Target

- **Web Technologies**
  - Introduction to Web Servers
  - Configuring a Web Server
  - Making your Own Website
  - Introduction to Database Servers
  - The Web Login Process

- **Web Application Attacks: Live Demonstrations**
  - Web Ripping
  - Input Validation attacks: SQL Injection
  - Google Hacking Database
  - PHP Remote Code Execution
  - Cross Site Scripting: XSS
  - Directory Transversal Attacks
- **Putting breaks on Web Application attacks**
  - Proper Input validation
  - Directory access controls
  - Deny Google to your website

## Wireless Hacking

- **Wireless Network Concepts**
  - Introduction to Wireless Terminologies
  - Wireless Access Points and Hotspots
- **Wireless Attacks**
  - Wireless War Driving
  - MAC Address Spoofing
  - WEP Key Cracking
- **Wireless Security Measures**
  - Changing the Default Settings
  - MAC Address Filtering
  - Configuring a WPA Key

## Software Cracking and Patching

- **Software Cracking and Serial Key Phishing**
  - Software Process Attaching
  - Application Debugging
  - Tracing the Serial Function
  - Serial Key Algorithms
- **Software Patching**
  - Disassembling the Software Setup
  - Tracking the Serial Conditional Jumps
  - Developing a Software Patch
- **Applying Application Security**
  - Introduction to Application Encryption
  - Using the Setup Encrypters
  - Applying strong Serial Key Algorithms