

OVERVIEW

In this course you will learn the core skills to build a solid security foundation. You will examine in detail the traffic that traverses the network at the packet and binary level. You will build solid knowledge on the lowest layers of the network. In the course you will conduct extensive hands-on exercises. You will learn to master the TCP/IP protocol. You will learn essential UNIX and Linux survival skills that separate you from the many security professionals who are Windows centric.

Additionally, you will be introduced to vulnerability assessment and the hacking methodology. When you finish this course, you will have a solid security foundation to pursue more advanced security training. For many, when you take a class like the Certified Ethical Hacker (CEH) you have not established the foundation that is needed to get the most from the course, this is where the Core Concepts course comes in, it is the bridge between a beginning level security course and CEH; furthermore, it focus on the main concepts required to build a foundation in security..

XTREME LABS



**EC COUNCIL – CORE
CONCEPTS OF CEH**

COURSE OBJECTIVES

By taking this course you will learn the foundations of security to include in-depth knowledge of the TCP/IP protocol.

- You will learn how to analyze packets for irregularities
- You will learn how to detect signs of crafted packets
- You will learn advanced protocol analysis techniques
- You will perform low-level protocol analysis
- You will learn functional skills in Unix and Linux
- You will learn virtualization and how to build your own virtual labs
- You will learn the fundamentals of vulnerability assessment and the hacking methodology.

WHY TAKE THIS COURSE?

To gain the skills needed to move on to more advanced security topics. Most professionals entering the field will lack the foundation that this course will bring. Take the free evaluation test and if most of the questions are new to you and the answers are unknown you would benefit greatly from taking this class.

TARGET STUDENT

This course is for anyone who wants to start out with the foundation and core concept skills for becoming a security professional.

COURSE CONTENT

Lesson 1: Introduction to Required Skills for Security

- TCP/IP
- Unix/linux
- Introduction to the hacking process
- Virtualization

Lesson 2: Introduction & Overview

- Introducing TCP/IP networks
- What TCP/IP Networks
- What TCP/IP provides: Key application services & multivendor capabilities TCP/IP & the internet

- Internet RFC's & STDs
- TCP/IP Protocol architecture
- Protocol layering concepts
- TCP/IP layering
- Components of TCP/IP networks
- Network protocols (IP, TCP, UDP, ICMP)

Lesson 3: UNIX/Linux

- Interacting with UNIX
- Graphical user interfaces
- The Common Desktop Environment (CDE)
- GNOME, Java Desktop System, others
- The command line interface
- Entering commands to the shell
- Browsing online documentation
- Displaying man pages
- Managing Files
- Essential file housekeeping tools
- Copying: cp
- Renaming: mv
- Removing: rm
- Linking: ln
- Editing: vi
- Printing: lp, lpr

Lesson 4: Introducing Linux

- The UNIX heritage
- Linux inception
- Linux kernel & GNU tools
- Open source licensing
- Distributions
- Accessing the system
- The GNOME desktop
- Customizing panels, launchers & applets
- Examining graphical applications
- Personalizing the terminal window
- Starting at the command line

Lesson 5: Overview of Virtual Machines

- Defining virtual machines (servers & workstations)
- Advantages of deploying VMs
- Creating a Virtual Machine from a System Image or Another Virtual Machine
- Conversion Process for Importing from Other Formats
- VMware Converter Compared to the Conversion Wizard
- Supported Source machines
- Operating System Compatibility

- Importing from Various Sources

Lesson 6: Introduction to Vulnerability Assessment

- Defining vulnerability
- Vulnerability scanners
- Challenge of vulnerability assessment
- Penetration testing defined
- Enumeration

Lesson 7: Introduction to the Hacking Process

- Surveillance
- Foot printing
- Scanning
- Vulnerability assessment
- Exploitation
- Covering tracks
- Evasion

Lesson 8: Challenges of Staying Current

- Books
- Mailing lists
- Videos
- Professional organizations