

## Cyber Security Courses

# **‘Cyber Security - Ethical Hacking for Beginners’**

## **Course Outline**

Class No	Modules Details	Duration
<b>Module 01: Introduction to Ethical Hacking</b>		
<b>01</b>	<ul style="list-style-type: none"> <li>➤ Overview of ethical hacking concepts</li> <li>➤ Importance of security in today’s digital world</li> <li>➤ The role of ethical hackers in protecting organizations</li> </ul>	<b>2 Hours</b>
<b>Module 02: Operating System (Linux, Kali Linux, VirtualBox)</b>		
<b>02</b>	<ul style="list-style-type: none"> <li>➤ Basics of Linux operating system</li> <li>➤ Introduction to Kali Linux (a Linux distribution for penetration testing)</li> <li>➤ Setting up VirtualBox for running virtual environments</li> </ul>	<b>2 Hours</b>
<b>Module 03: Scanning Networks</b>		
<b>03</b>	<ul style="list-style-type: none"> <li>➤ Essential Linux commands</li> <li>➤ Navigating the file system, managing files and directories</li> <li>➤ Basic networking commands</li> </ul>	<b>2 hours</b>

Module 04: Kali Linux Advanced Commands		
04	<ul style="list-style-type: none"> <li>➤ More complex Linux commands</li> <li>➤ Scripting and automation</li> <li>➤ Command chaining, pipes, and redirection</li> </ul>	2 Hours
Module 05: NMAP		
05	<ul style="list-style-type: none"> <li>➤ Network mapping with NMAP</li> <li>➤ Scanning and identifying open ports</li> <li>➤ Understanding services and systems in a network</li> </ul>	2 Hours
Module 06: WireShark		
06	<ul style="list-style-type: none"> <li>➤ Network traffic capture and analysis with WireShark</li> <li>➤ Understanding packets and protocols</li> <li>➤ Analyzing network vulnerabilities</li> </ul>	2 Hours
Module 07: Password Cracking with “John the Ripper”		
07	<ul style="list-style-type: none"> <li>➤ Introduction to password cracking techniques</li> <li>➤ Using John the Ripper to crack password hashes</li> </ul>	2 Hours
Module 08: HashCat		
08	<ul style="list-style-type: none"> <li>➤ Introduction to HashCat for password recovery</li> <li>➤ GPU-accelerated password cracking</li> <li>➤ Understanding different hash types</li> </ul>	2 Hours

Module 09: Hydra		
09	<ul style="list-style-type: none"> <li>➤ Password cracking using Hydra</li> <li>➤ Automating login attacks for password guessing</li> </ul>	2 Hours
Module 10: Netcat		
10	<ul style="list-style-type: none"> <li>➤ Basics of Netcat (the Swiss Army knife for networking)</li> <li>➤ Using Netcat for port scanning, file transfers, and as a backdoor</li> </ul>	2 Hours
	✓ <b>Total Course Length</b>	<b>20 Hours</b>