

SAVORY MINDS

NETWORKING CORE+ESSENTIALS

NETWORKING

Kick-Start your career in Cybersecurity Today!

Level: Beginner-Intermediate

No Prior Experience Required
Premium Classes | Hands-on Sessions | CEH
Expertise

SAVORY MINDS CORE + ESSENTIALS SERIES

To address the increasing talent gap and shortage of skilled cybersecurity professionals, Savory Minds, the creator of the top-tier Certified Ethical Hacker (C|EH) program, has introduced the Core + Essentials Series (EH|CES). This program provides comprehensive, hands-on technical training designed to prepare learners for entry-level positions in cybersecurity. Our objective is to develop a skilled workforce ready to take on roles such as systems analysts, cybersecurity analysts, incident analysts, and more, through instructor-led learning that remains affordable.

This series is an engaging, hands-on program focusing on Four critical cybersecurity domains: Ethical Hacking, Networking, Digital Forensics, Penetration Testing. This series is ideal for graduates, career switchers, beginners, and IT/Technology teams with little to no prior experience in IT/Cybersecurity, enabling them to specialize in essential areas.

Start Your Cybersecurity Journey Today!

What is Savory Minds Cyber Labs?

It is an introductory Cybersecurity Certifications, Training offering platform that lays the foundation in ethical hacking and penetration testing, equipping learners for a career in cybersecurity. This course covers key topics such as threats and vulnerabilities, password cracking, web application attacks, IoT, cloud computing, and penetration testing fundamentals, hands-on practical experience, giving learners the necessary skills for a future in cybersecurity.

Test your skills with our exciting Exercises, seamlessly integrated into our Capstone project. This includes live virtual machines, genuine software, and real networks, all within a secure and regulated environment. These exclusive hands-on, human-versus-machine challenges will help you develop the practical skills essential for success in your cyber professional role.

EH|CES Certified learners gain formal recognition, enhancing their resumes and showcasing their expertise to prospective employers. This certification boosts their employment prospects, leads to higher salaries, and increases job satisfaction.

If you're ready to advance your knowledge in ethical hacking, explore our Ethical Hacking Certification (Certified Ethical Hacker C/EH) v.12

Networking Core + Essentials

Ignite Your Cybersecurity Career with Savory Minds

No IT or Cybersecurity Experience Needed

- Engaging Video Lessons
- Interactive Hands-on Labs
- Thrilling Challenges

Why Choose Networking Essentials?

At Savory Minds, we're bridging the gap in cybersecurity expertise with our Ethical Hacking Essentials program. Tailored for graduates, career changers, and IT teams, this immersive, affordable course will equip you with the skills necessary for entry-level cybersecurity roles.

Discover the Future of Cybersecurity

Dive into the dynamic world of ethical hacking and penetration testing. Explore the fundamentals of computer and network security, learn about threats and vulnerabilities, and master password cracking, web application attacks, IoT, cloud security, and more.

Achieve Your Certification and Stand Out

Earn the prestigious EH|CES certification, showcasing your expertise to employers and enhancing your career opportunities.

Course Outline

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Module 01: Network Security Fundamentals

Topics Covered:

- Fundamentals of Network Security
- Network Security Protocols

Lab Exercises:

- Using Nmap: Learn how to perform network discovery and security auditing.
- Wireshark: Capture and analyze network traffic to understand packet structures.

Module 02: Identification, Authentication, and Authorization

Topics Covered:

- Access Control Principles, Terminologies, and Models
- Identity and Access Management (IAM) Concepts

Lab Exercises:

- Access Controls in Windows Machine with Hydra: Implement and manage access control using this versatile login cracker.
- Managing Access Controls in Linux with John the Ripper: Secure user accounts by detecting weak passwords.
- Role-Based Access Control in Windows Admin Center (WAC) using Kerberos: Configure and manage authentication protocols.

Module 03: Network Security Controls - Administrative Controls

Topics Covered:

- Regulatory Frameworks, Laws, and Acts
- Designing and Developing Security Policies
- Conducting Security and Awareness Training

Lab Exercises:

• Implementing Password Policies Using Windows Group Policy and Medusa: Ensure strong password enforcement and auditing.

Module 04: Network Security Controls - Physical Controls

Topics Covered:

- Importance of Physical Security
- Physical Security Controls
- Workplace Security
- Environmental Controls

Lab Exercises:

• Physical Security Measures with Kali Linux tools like USBGuard: Implement and manage physical access controls.

Module 05: Network Security Controls - Technical Controls

Topics Covered:

- Types of Network Segmentation
- Types of Firewalls and their Role
- Types of IDS/IPS and their Role
- Types of Honeypots
- Types of Proxy Servers and their Benefits
- Fundamentals of VPN and its Importance in Network Security
- Security Incident and Event Management (SIEM)
- User Behavior Analytics (UBA)
- Antivirus/Anti-Malware Software

Lab Exercises:

- **iptables:** Implementing host-based firewall protection.
- UFW (Uncomplicated Firewall): Configuring a simple firewall on Linux systems.
- Suricata: Deploying network-based IDS.
- **Honeyd:** Setting up a honeypot to detect malicious activity.
- **OpenVPN:** Establishing secure VPN connections.
- Wireshark and tcpdump: Analyzing network traffic for suspicious activity.
- ClamAV: Deploying antivirus solutions.

Module 06: Virtualization and Cloud Computing

Topics Covered:

- Virtualization Essential Concepts and OS
- Virtualization Security
- Cloud Computing Fundamentals
- Insights into Cloud Security and Best Practices

Lab Exercises:

- Docker Security with Lynis: Audit Docker security.
- AWS IAM with Kali tools: Secure and manage AWS environments.

Module 07: Wireless Network Security

Topics Covered:

- Wireless Network Fundamentals
- Wireless Network Encryption Mechanisms
- Types of Wireless Network Authentication Methods
- Implementing Wireless Network Security Measures

Lab Exercises:

- aircrack-ng: Analyzing and securing wireless networks.
- **reaver:** Testing wireless security.

Module 08: Mobile Device Security

Topics Covered:

- Mobile Device Connection Methods
- Mobile Device Management Concepts
- Common Mobile Usage Policies in Enterprises
- Security Risks and Guidelines Associated with Enterprises Mobile Usage Policies
- Implement Enterprise-level Mobile Security Management Solutions
- Implement General Security Guidelines and Best Practices on Mobile Platforms

Lab Exercises:

• Android Security with Drozer: Analyzing Android applications for vulnerabilities.

Module 09: IoT Device Security

Topics Covered:

- IoT Devices, Application Areas, and Communication Models
- Security in IoT-enabled Environments

Lab Exercises:

- Wireshark: Monitoring IoT device communication.
- sslstrip: Securing IoT communication using SSL/TLS.

Module 10: Cryptography and PKI

Topics Covered:

- Cryptographic Techniques
- Cryptographic Algorithms
- Cryptography Tools
- Public Key Infrastructure (PKI)

Lab Exercises:

- hashcat: Calculating one-way hashes and cracking password hashes.
- **openssl:** Creating and managing self-signed certificates.

Module 11: Data Security

Topics Covered:

- Data Security and its Importance
- Security Controls for Data Encryption
- Data Backup and Retention
- Data Loss Prevention Concepts

Lab Exercises:

- **VeraCrypt:** Performing disk encryption.
- **Scalpel:** File recovery.
- **rsync:** Data backup and restoration.

Module 12: Network Traffic Monitoring

Topics Covered:

- Need and Advantages of Network Traffic Monitoring
- Determining Baseline Traffic Signatures for Normal and Suspicious Network Traffic
- Performing Network Monitoring for Suspicious Traffic

Lab Exercises:

- Wireshark: Capturing and analyzing network traffic.
- **tcpdump:** Applying filters and examining packet headers.

Key Features

- 20+ hours of engaging video training
- 15 interactive lab activities
- Comprehensive Hands-on Material

Benefits

- **Practical Skills**: Gain hands-on experience with industry-standard tools.
- **Job Readiness**: Prepare for roles like Cybersecurity Analyst, Penetration Tester, and more
- **Recognized Certification**: Enhance your resume with globally recognized EH|CES certification.

• Comprehensive Learning: Cover all essential domains in cybersecurity.

Why It's Necessary in the Present World

With cyber threats evolving rapidly, organizations need skilled professionals to defend their networks. Ethical hackers are critical in identifying and mitigating vulnerabilities before malicious actors can exploit them.

How It's Promising for Your Career

Cybersecurity is one of the fastest-growing fields, with high demand for qualified professionals. Certified ethical hackers often enjoy lucrative salaries and excellent job security.

Who Should Choose This Course?

- **High School Students & Graduates**: Start your cybersecurity career early.
- Career Switchers: Transition into the cybersecurity field with foundational knowledge.
- IT Professionals: Enhance your skill set and advance your career.
- **Beginners**: No prior experience needed, just a passion for cybersecurity.

About Cyber Labs

Savory Minds Cyber Labs is dedicated to cultivating cybersecurity professionals through innovative, accessible training programs. Our globally recognized certifications empower individuals and organizations to build robust cybersecurity defence. Trusted by industry leaders and academic institutions worldwide, we are committed to shaping the future of cybersecurity education.

Our Achievements

- Trusted by top organizations for our training programs.
- Global Presence: Operating in over 4+ States.
- **Industry Recognition**: ISO Certified

Ready to Transform Your Future?

Learn more and Enroll today at www.savoryminds.com