

Szkolenie: OffSec  
OffSec PEN-200 Penetration Testing with Kali Linux



## DOSTĘPNE TERMINY

2025-05-12 | 5 dni | Kraków / Wirtualna sala  
2025-09-08 | 5 dni | Warszawa / Wirtualna sala  
2025-09-22 | 5 dni | Virtual Classroom  
2025-12-01 | 5 dni | Warszawa / Wirtualna sala  
2025-12-15 | 5 dni | Virtual Classroom

## Cel szkolenia:



The industry-leading Penetration Testing with Kali Linux (PWK/PEN-200) course introduces penetration testing methodologies, tools, and techniques in a hands-on, self-paced environment.

Access [PEN-200's first Learning Module](#) for an overview of course structure, learning approach, and what the course covers.

Learners who complete the course and pass the exam after November 1, 2024 will earn the OffSec Certified Professional (OSCP & OSCP+) penetration testing certification which requires holders to successfully attack and penetrate various live machines in a safe lab environment. These certifications are considered to be more technical than other penetration testing certifications and is one of the few that requires evidence of practical pen testing skills. The OSCP is a lifetime certification and the OSCP+ expires after 3 years, representing learners' commitment to continuing education in the complex cybersecurity space.

## Benefits

- Increase OSCP preparedness with OffSec Academy, expert instructor-led streaming sessions

- Access to recently retired OSCP exam machines
- Introduction to the latest hacking tools and techniques
- Training from the experts behind Kali Linux
- Develop an adversarial mindset

***Each participant in an authorized OffSec PEN-200 training held at Compendium CE receives a "Learn One" license, which includes, among other benefits, a free OSCP/OSCP+ exam voucher.***

Who is this course for?

- Infosec professionals transitioning into penetration testing
- Pentesters seeking one of the best pentesting certifications
- Those interested in pursuing a penetration tester career path
- Security professionals
- Network administrators
- Other technology professionals

What competencies will you gain?

- Learn how to become a penetration tester by using information-gathering techniques to identify and enumerate targets running various operating systems and services
- Writing basic scripts and tools to aid in the penetration testing process
- Analyzing, correcting, modifying, cross-compiling, and porting public exploit code
- Conducting remote, local privilege escalation, and client-side attacks
- Identifying and exploiting XSS, SQL injection, and file inclusion vulnerabilities in web applications
- Leveraging tunneling techniques to pivot between networks
- Creative problem-solving and lateral thinking skills

Plan szkolenia:

- Penetration Testing with Kali Linux : General Course Introduction
  - Welcome to PWK
  - Take inventory over what's included in the course
  - Set up an Attacking Kali VM

- Connect to and interact over the PWK VPN
- Understand how to complete Module Exercises
- How to Approach the Course
  - Conceptualize a learning model based on increasing uncertainty
  - Understand the different learning components included in PEN-200
- Summary of PWK Learning Modules
  - Obtain a high level overview of what's covered in each PEN-200 Learning Module
- Introduction to Cybersecurity
  - The Practice of Cybersecurity
    - Recognize the challenges unique to information security
    - Understand how "offensive" and "defensive" security reflect each other
    - Begin to build a mental model of useful mindsets applicable to information security
  - Threats and Threat Actors
    - Understand how attackers and defenders learn from each other
    - Understand the differences between risks, threats, vulnerabilities, and exploits
    - List and describe different classes of threat actor
    - Recognize some recent cybersecurity attacks
  - The CIA Triad
    - Understand why it's important to protect the confidentiality of information
    - Learn why it's important to protect the integrity of information
    - Explore why it's important to protect the availability of information Security Principles, Controls, and Strategies
    - Understand the importance of multiple layers of defense in a security strategy
    - Describe threat intelligence and its applications in an organization
    - Learn why access and user privileges should be restricted as much as possible
    - Understand why security should not depend on secrecy
    - Identify policies that can mitigate threats to an organization
    - Determine which controls an organization can use to mitigate cybersecurity threats
  - Cybersecurity Laws, Regulations, Standards, and Frameworks
  - Gain a broad understanding of various legal and regulatory issues surrounding cybersecurity
  - Understand different frameworks and standards that help organizations orient their cybersecurity activities
  - Career Opportunities in Cybersecurity
    - Identify career opportunities in cybersecurity
- Effective Learning Strategies
  - Learning Theory

- Understand the general state of our understanding about education and education theory
- Understand the basics of memory mechanisms and dual encoding
- Recognize some of the problems faced by learners, including "The Curve of Forgetting" and cognitive load
- Unique Challenges to Learning Technical Skills
  - Recognize the differences and advantages of digital learning materials
  - Understand the challenge of preparing for unknown scenarios
  - Understand the potential challenges of remote or asynchronous learning
- OffSec Methodology
  - Understand what is meant by a Demonstrative Methodology
  - Understand the challenge of preparing for unknown scenarios
  - Understand the potential challenges of remote or asynchronous learning
- Case Study: `chmod -x chmod`
  - Review a sample of learning material about the executable permission, expand beyond the initial information set, and work through a problem
  - Understand how OffSec's approach to teaching is reflected in the sample material
- Tactics and Common Methods
  - Learn about Retrieval Practice
  - Understand Spaced Practice
  - Explore the SQ3R and PQ4R Method
  - Examine the Feynman Technique
  - Understand the Leitner System
- Advice and Suggestions on Exams
  - Develop strategies for dealing with exam-related stress
  - Recognize when you might be ready to take the exam
  - Understand a practical approach to exams
- Practical Steps
  - Create a long term strategy
  - Understand how to use a time allotment strategy
  - Learn how and when to narrow your focus
  - Understand the importance of a group of co-learners and finding a community
  - Explore how best to pay attention and capitalize on our own successful learning strategies
- Report Writing for Penetration Testers
  - Understanding Note-Taking
    - Review the deliverables for penetration testing engagements

- Understand the importance of note portability Understanding Note-Taking
- Identify the general structure of pentesting documentation
- Choose the right note-taking tool
- Understand the importance of taking screenshots
- Use tools to take screenshots
- Writing Effective Technical Penetration Testing Reports
  - Identify the purpose of a technical report
  - Understand how to specifically tailor content
  - Construct an Executive Summary
  - Account for specific test environment considerations
  - Create a technical summary
  - Describe technical findings and recommendations
  - Recognize when to use appendices, resources, and references
- Information Gathering
  - The Penetration Testing Lifecycle
    - Understand the stages of a Penetration Test
    - Learn the role of Information Gathering inside each stage
    - Understand the differences between Active and Passive Information Gathering
  - Passive Information Gathering
    - Understand the two different Passive Information Gathering approaches
    - Learn about Open Source Intelligence (OSINT)
    - Understand Web Server and DNS passive information gathering
  - Active Information Gathering
    - Learn to perform Netcat and Nmap port scanning
    - Conduct DNS, SMB, SMTP, and SNMP Enumeration
    - Understand Living off the Land Techniques
- Vulnerability Scanning
  - Vulnerability Scanning Theory
    - Gain a basic understanding of the Vulnerability Scanning process
    - Learn about the different types of Vulnerability Scans
    - Understand the considerations of a Vulnerability Scan
  - Vulnerability Scanning with Nessus
    - Install Nessus
    - Understand the different Nessus Components
    - Configure and perform a vulnerability scan
    - Understand and work with the results of a vulnerability scan with Nessus

- Provide credentials to perform an authenticated vulnerability scan
- Gain a basic understanding of Nessus Plugins
- Vulnerability Scanning with Nmap
  - Understand the basics of the Nmap Scripting Engine (NSE)
  - Perform a lightweight Vulnerability Scan with Nmap
  - Work with custom NSE scripts
- Introduction to Web Applications
  - Web Application Assessment Methodology
    - Understand web application security testing requirements
    - Learn different types of methodologies of web application testing
    - Learn about the OWASP Top10 and most common web vulnerabilities
  - Web Application Assessment Tools
    - Perform common enumeration techniques on web applications
    - Understand Web Proxies theory
    - Learn how Burp Suite proxy works for web application testing
  - Web Application Enumeration
    - Learn how to debug Web Application source code
    - Understand how to enumerate and inspect Headers, Cookies, and Source Code
    - Learn how to conduct API testing methodologies
  - Cross-Site Scripting (XSS)
    - Understand Cross-Site Scripting vulnerability types
    - Exploit basic Cross-Site Scripting
    - Perform Privilege Escalation via Cross-Site Scripting
- Common Web Application Attacks
  - Directory Traversal
    - Understand absolute and relative paths
    - Learn how to exploit directory traversal vulnerabilities
    - Use encoding for special characters
  - File Inclusion Vulnerabilities
    - Learn the difference between File Inclusion and Directory Traversal vulnerabilities
    - Gain an understanding of File Inclusion vulnerabilities
    - Understand how to leverage Local File Inclusion (LFI) to obtain code execution
    - Explore PHP Wrapper usage
    - Learn how to perform Remote File Inclusion (RFI) attacks
  - File Upload Vulnerabilities
    - Understand File Upload Vulnerabilities

- Learn how to identify File Upload vulnerabilities
- File Upload Vulnerabilities
  - Explore different vectors to exploit File Upload vulnerabilities
- Command Injection
  - Learn about command injection in web applications
  - Use operating system commands for OS command injection
  - Understand how to leverage command injection to gain system access
- SQL Injection Attacks
  - SQL Theory and Database Types
    - Refresh SQL theory fundamentals
    - Learn different DB types
    - Understand different SQL syntax
  - Manual SQL Exploitation
    - Manually identify SQL injection vulnerabilities
    - Understand UNION SQLi payloads
    - Learn about Error SQLi payloads
    - Understand Blind SQLi payloads
  - Manual and Automated Code Execution
    - Exploit MSSQL Databases with xp\_cmdshell
    - Automate SQL Injection with SQLmap
- Client-Side Attacks
  - Target Reconnaissance
    - Gather information to prepare client-side attacks
    - Leverage client fingerprinting to obtain information
  - Exploiting Microsoft Office
    - Understand variations of Microsoft Office client-side attacks
    - Install Microsoft Office
    - Leverage Microsoft Word Macros
  - Abusing Windows Library Files
    - Prepare an attack with Windows library files
    - Leverage Windows shortcuts to obtain code execution
- Locating Public Exploits
  - Getting Started
    - Understand the risk of executing untrusted exploits
    - Understand the importance of analyzing the exploit code before execution
  - Online Exploit Resources

- Access multiple online exploit resources
- Differentiate between various online exploit resources
- Understand the risks between online exploit resources
- Use Google search operators to discover public exploits
- Offline Exploit Resources
  - Access Multiple Exploit Frameworks
  - Use SearchSploit
  - Use Nmap NSE Scripts
- Exploiting a Target
  - Follow a basic penetration test workflow to enumerate a target system
  - Completely exploit a machine that is vulnerable to public exploits
  - Discover appropriate exploits for a target system
  - Execute a public exploit to gain a limited shell on a target host
- Fixing Exploits
  - Fixing Memory Corruption Exploits
    - Understand high-level buffer overflow theory
    - Cross-compile binaries
    - Modify and update memory corruption exploits
  - Fixing Web Exploits
    - Fix Web application exploits
    - Troubleshoot common web application exploit issues
- Antivirus Evasion
  - Antivirus Evasion Software Key Components and Operations
    - Recognize known vs unknown threats
    - Understand AV key components
    - Understand AV detection engines
  - AV Evasion in Practice
    - Understand antivirus evasion testing best practices
    - Manually evade AV solutions
    - Leverage automated tools for AV evasion
- Password Attacks
  - Attacking Network Services Logins
    - Attack SSH and RDP Logins
    - Attack HTTP POST login forms
  - Password Cracking Fundamentals
    - Understand the fundamentals of password cracking



- Mutate Wordlists
- Explain the basic password cracking methodology
- Attack password manager key files
- Attack the passphrase of SSH private keys
- Working with Password Hashes
  - Obtain and crack NTLM hashes
  - Pass NTLM hashes
  - Obtain and crack Net-NTLMv2 hashes
  - Relay Net-NTLMv2 hashes
- Windows Privilege Escalation
  - Enumerating Windows
    - Understand Windows privileges and access control mechanisms
    - Obtain situational awareness
    - Search for sensitive information on Windows systems
    - Find sensitive information generated by PowerShell
    - Become familiar with automated enumeration tools
  - Leveraging Windows Services
    - Hijack service binaries
    - Hijack service DLLs
    - Abuse Unquoted service paths
  - Abusing other Windows Components
    - Leverage Scheduled Tasks to elevate our privileges
    - Understand the different types of exploits leading to privilege escalation
    - Abuse privileges to execute code as privileged user accounts
- Linux Privilege Escalation
  - Enumerating Linux
    - Understand files and user privileges on Linux
    - Perform manual enumeration
    - Conduct automated enumeration
  - Exposed Confidential Information
    - Understand user history files
    - Inspect user trails for credential harvesting
    - Inspect system trails for credential harvesting
  - Insecure File Permissions
    - Abuse insecure cron jobs to escalate privileges
    - Abuse Insecure file permissions to escalate privileges

- Insecure System Components
  - Abuse SUID programs and capabilities for privilege escalation
  - Circumvent special sudo permissions to escalate privileges
  - Enumerate the system's kernel for known vulnerabilities, then abuse them for privilege escalation
- Port Redirection and SSH Tunneling
  - Port Forwarding with \*NIX Tools
    - Learn about port forwarding
    - Understand why and when to use port forwarding
    - Use Socat for port forwarding
  - SSH Tunneling
    - Learn about SSH tunneling
    - Understand how to perform SSH local port forwarding
    - Understand how to perform SSH dynamic port forwarding
    - Understand how to perform SSH remote port forwarding
    - Understand how to perform SSH remote dynamic port forwarding
  - Port Forwarding with Windows Tools
    - Understand port forwarding and tunneling with ssh.exe on Windows
    - Understand port forwarding and tunneling with Plink
    - Understand port forwarding with Netsh
- Advanced Tunneling
  - Tunneling Through Deep Packet Inspection
    - Learn about HTTP tunneling
    - Perform HTTP tunneling with Chisel
    - Learn about DNS tunneling
    - Perform DNS tunneling with dnscat
- The Metasploit Framework
  - Getting Familiar with Metasploit
    - Setup and navigate Metasploit
    - Use auxiliary modules
    - Leverage exploit modules
  - Using Metasploit Payloads
    - Understand the differences between staged and non-staged payloads
    - Explore the Meterpreter payload
    - Create executable payloads
  - Performing Post-Exploitation with Metasploit
    - Use core Meterpreter post-exploitation features

- Use post-exploitation modules
- Perform pivoting with Metasploit
- Automating Metasploit
  - Create resource scripts
  - Use resource scripts in Metasploit
- Active Directory Introduction and Enumeration
  - Active Directory Manual Enumeration
    - Enumerate Active Directory using legacy Windows applications
    - Use PowerShell and .NET to perform additional AD enumeration
  - Manual Enumeration Expanding our Repertoire
    - Enumerate Operating Systems Permissions and logged on users
    - Enumerate Through Service Principal Names
    - Enumerate Object Permissions
    - Explore Domain Shares
  - Active Directory Automated Enumeration
    - Collect domain data using SharpHound
    - Analyze domain data using BloodHound
- Attacking Active Directory Authentication
  - Understanding Active Directory Authentication
    - Understand NTLM Authentication
    - Understand Kerberos Authentication
    - Become familiar with cached AD Credentials
  - Performing Attacks on Active Directory Authentication
    - Use password attacks to obtain valid user credentials
    - Abuse the enabled user account options
    - Abuse the Kerberos SPN authentication mechanism
    - Forge service tickets
    - Impersonate a domain controller to retrieve any domain user credentials
- Lateral Movement in Active Directory
  - Active Directory Lateral Movement Techniques
    - Understand WMI, WinRS, and WinRM lateral movement techniques
    - Abuse PsExec for lateral movement
    - Learn about Pass The Hash and Overpass The Hash as lateral movement techniques
    - Misuse DCOM to move laterally
  - Active Directory Persistence

- Understand the general purpose of persistence techniques
- Leverage golden tickets as a persistence attack
- Learn about shadow copies and how they can be abused for persistence
- Assembling the Pieces
  - Enumerating the Public Network
    - Enumerate machines on a public network
    - Obtain useful information to utilize for later attacks
  - Attacking WEBSRV1
    - Utilize vulnerabilities in WordPress Plugins
    - Crack the passphrase of a SSH private key
    - Elevate privileges using sudo commands
    - Leverage developer artifacts to obtain sensitive information
  - Gaining Access to the Internal Network
    - Validate domain credentials from a non-domain-joined machine
    - Perform phishing to get access to internal network
  - Enumerating the Internal Network
    - Gain situational awareness in a network
    - Enumerate hosts, services, and sessions in a target network
    - Identify attack vectors in target network
  - Attacking the WebApplication on INTERNALSRV1
    - Perform Kerberoasting
    - Abuse a WordPress Plugin function for a Relay attack
  - Gaining Access to the Domain Controller
    - Gather information to prepare client-side attacks
    - Leverage client fingerprinting to obtain information
- Trying Harder: The Labs
  - PWK Challenge Lab Overview
    - Learn about the different kinds of Challenge Labs
    - Obtain a high level overview of each scenario
    - Understand how to treat the mock OSCP Challenge Labs
  - Challenge Lab Details
    - Understand how to think about the concept of dependency
    - Understand the lack of meaning inherent to IP address ordering
    - Learn about the concept of “decoy” machines
    - Learn how Routers and Network Address Translation affect the scenarios
    - Understand how to treat the credentials and password attacks

- The OSCP Exam Information
  - Learn about the OSCP Certification Exam

## Wymagania:

All learners are required to have:

- Solid understanding of TCP/IP networking
- Reasonable Windows and Linux administration experience
- Familiarity with basic Bash and/or Python scripting

New to Penetration Testing? Set yourself up for success by participating in the OffSec Security Fundamentals course. Adopt basic cybersecurity-adjacent concepts, cultivate the mindset necessary for a successful cybersecurity career, and provide the prerequisites for OffSec's advanced courses

## Poziom trudności



## Certyfikaty:

The participants will obtain certificates signed by Compendium CE (course completion).

The PEN-200 course and online lab prepares you for the OSCP/OSCP+ penetration testing certification. Learn more about the OSCP exam <https://help.offsec.com/hc/en-us/articles/4412170923924-OSCP-Exam-FAQ>

Everything you need to know about the OSCP+ <https://www.offsec.com/blog/everything-you-need-to-know-about-the-oscp-plus/>

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## Prowadzący:

Authorized OffSec Trainer

## Informacje dodatkowe:

The course includes a license "Learn One".

The bundle includes 365-day access to a single course, two of exam attempts, fundamental learning paths and assessments <https://help.offsec.com/hc/en-us/articles/23688368526100-Which-Learning-Paths-should-I-have-access-to>, and a certification badge awarded upon passing your exam.