Student Transcript

30-03-2026

HTB ACADEMY

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#1538822

Paths completed: 12
Targets compromised: 658
Ranking: Top 1%

PATHS COMPLETED

PROGRESS

Web Penetration Tester

20 Modules Medium

The Web Penetration Tester Job Role Path is for individuals who want to enter the world of web penetration testing with little to no prior experience in it. This path covers core web security assessment and web penetration testing concepts, and provides a deep understanding of the attack tactics used during web penetration testing. Armed with the necessary theoretical background, multiple practical exercises, and a proven web penetration testing methodology, students will go through all web penetration testing stages, from reconnaissance and vulnerability identification to exploitation, documentation, and communication to vendors. Upon completing this job role path, you will have become proficient in the most common web penetration testing and attack techniques against web applications and APIs, and be in the position of professionally reporting vulnerabilities to a vendor.

100% Completed

Basic Toolset

7 Modules Medium

In this path, modules cover the basic tools needed to be successful in network and web application penetration testing. This is not an exhaustive listing of all tools (both open source and commercial) available to us as security practitioners but covers tried and true tools that we find ourselves using on every technical assessment that we perform. Learning how to use the basic toolset is essential, as many different tools are used in penetration testing. We need to understand which of them to use for the various situations we will come across.

100% Completed

Cracking into Hack the Box

3 Modules Easy

To be successful in any technical information security role, we must have a broad understanding of specialized tools, tactics, and terminology. This path introduces core concepts necessary for anyone interested in a hands-on technical infosec role. The modules also provide the essential prerequisite knowledge for joining the main Hack The Box platform, progressing through Starting Point through easy-rated retired machines, and solving "live" machines with no walkthrough. It also includes helpful information about staying organized, navigating the HTB platforms, common pitfalls, and selecting a penetration testing distribution. Students will complete their first box during this path with a guided walkthrough and be challenged to complete a box on their own by applying the knowledge learned in the Getting Started module.

100% Completed

Local Privilege Escalation

2 Modules Medium

Privilege escalation is a vital phase of the penetration testing process, one we may revisit multiple times during an engagement. During our assessments, we will encounter a large variety of operating systems and applications. Most often, if we can exploit a vulnerability and gain a foothold on a host, it will be running some version of Windows or Linux. Both present a large attack surface with many tactics and techniques available to us for escalating privileges. This path teaches the core concepts of local privilege escalation necessary for being successful against Windows and Linux systems. The path covers manual enumeration and exploitation and the use of tools to aid in the process.

100% Completed

Penetration Tester

28 Modules Medium

The Penetration Tester Job Role Path is for newcomers to information security who aspire to become professional penetration testers. This path covers core security assessment concepts and provides a deep understanding of the specialized tools, attack tactics, and methodology used during penetration testing. Armed with the necessary theoretical background and multiple practical exercises, students will go through all penetration testing stages, from reconnaissance and enumeration to documentation and reporting. Upon completing this job role path, you will have obtained the practical skills and mindset necessary to perform professional security assessments against enterprise-level infrastructure at an intermediate level. The Information Security Foundations skill path can be considered prerequisite knowledge to be successful while working through this job role path.

100% Completed

Operating System Fundamentals

4 Modules Easy

To succeed in information security, we must have a deep understanding of the Windows and Linux operating systems and be comfortable navigating the command line on both as a "power user." Much of our time in any role, but especially penetration testing, is spent in a Linux shell, Windows cmd or PowerShell console, so we must have the skills to navigate both types of operating systems with ease, manage system services, install applications, manage permissions, and harden the systems we work from in accordance with security best practices.

100% Completed

Intro to Binary Exploitation

4 Modules Hard

Binary exploitation is a core tenet of penetration testing, but learning it can be daunting. This is mainly due to the complexity of binary files and their underlying machine code and how binary files interact with computer memory and the processor. To learn the basics of binary exploitation, we must first have a firm grasp of Computer Architecture and the Assembly Language. To move into more advanced binary exploitation, we must have a firm grasp on basic buffer overflow attacks, principles such as CPU architecture, and CPU registers for 32-bit Windows and Linux systems. Furthermore, a strong foundation in Python scripting is essential for writing and understanding exploit scripts.

100% Completed

Information Security Foundations

12 Modules Easy

Information Security is a field with many specialized and highly technical disciplines. Job roles like Penetration Tester & Information Security Analyst require a solid technical foundational understanding of core IT & Information Security topics. This skill path is made up of modules that will assist learners in developing &/or strengthening a foundational understanding before proceeding with learning the more complex security topics. Every long-standing building first needs a solid foundation. Welcome to Information Security Foundations.

100% Completed

SOC Analyst

15 Modules Medium

The SOC Analyst Job Role Path is for newcomers to information security who aspire to become professional SOC analysts. This path covers core security monitoring and security analysis concepts and provides a deep understanding of the specialized tools, attack tactics, and methodology used by adversaries. Armed with the necessary theoretical background and multiple practical exercises, students will go through all security analysis stages, from traffic analysis and SIEM monitoring to DFIR activities and reporting. Upon completing this job role path, you will have obtained the practical skills and mindset necessary to monitor enterprise-level infrastructure and detect intrusions at an intermediate level. The SOC Analyst Prerequisites skill path can be considered prerequisite knowledge to be successful while working through this job role path.

100% Completed

SOC Analyst Prerequisites

10 Modules Easy

The SOC Analyst Prerequisites path is designed for those looking to become SOC/Security Analysts. It dives into fundamental IT and Information Security subjects including networking, Linux and Windows operating systems, basic programming and scripting, as well as working with Assembly. In addition, students will be exposed to the fundamental concepts of information security and penetration testing. This skill path is made up of modules that will assist learners in developing and strengthening a foundational understanding before proceeding with learning more complex security topics.

100% Completed

Junior Cybersecurity Analyst

20 Modules Easy

The Junior Cybersecurity Analyst Job Role Path is the first step to enter and gain practical, hands-on experience in the cybersecurity field. This path covers essential cybersecurity concepts and builds a foundational understanding of operating systems, offensive and defensive tools, attack tactics, log analysis, and methodologies employed by penetration testers and security operations centers. Students will explore key principles while gaining practical experience in both offensive and defensive cybersecurity assessments, including the basics of penetration testing and security analysis. This job role path equips you with the skills and mindset needed to launch a career in cybersecurity, offering a well-rounded foundation in both offensive and defensive techniques that reflects the evolving demands of real-world cybersecurity operations.

100% Completed

Active Directory Enumeration

3 Modules Hard

Active Directory (AD) is widely used by companies across all verticals/sectors, non-profits, government agencies, and educational institutions of all sizes. By its nature, AD is easily misconfigured and has many inherent flaws and widely known vulnerabilities. Due to the sheer number of objects and in AD and complex intertwined relationships that form as an AD network grows, it becomes increasingly difficult to secure and presents a vast attack surface. AD environments can become quite large and often hold many obvious and more difficult to discover flaws. A deep understanding of AD enumeration techniques and tools is essential to becoming a well-rounded information security professional.

100% Completed

MODULE PROGRESS

Learning Process

20 Sections Fundamental General

The learning process is one of the essential and most important components that is often overlooked. This module does not teach you techniques to learn but describes the process of learning adapted to the field of information security. You will learn to understand how and when we learn best and increase and improve your learning efficiency greatly.

100% Completed

Intro to Academy

8 Sections Fundamental General

Your first stop in Hack The Box Academy to become acquainted with the platform, its features, and its learning process.

100% Completed

Hacking WordPress

16 Sections Easy Offensive

WordPress is an open-source Content Management System (CMS) that can be used for multiple purposes.

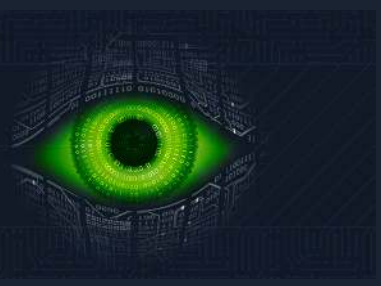
100% Completed

Linux Fundamentals

30 Sections | Fundamental | General

This module covers the fundamentals required to work comfortably with the Linux operating system and shell.

100% Completed



Network Enumeration with Nmap

12 Sections | Easy | Offensive

Nmap is one of the most used networking mapping and discovery tools because of its accurate results and efficiency. The tool is widely used by both offensive and defensive security practitioners. This module covers fundamentals that will be needed to use the Nmap tool for performing effective network enumeration.

100% Completed

Cracking Passwords with Hashcat

14 Sections | Medium | Offensive

This module covers the fundamentals of password cracking using the Hashcat tool.

100% Completed

Introduction to Bash Scripting

10 Sections | Easy | General

This module covers the basics needed for working with Bash scripts to automate tasks on Linux systems. A strong grasp of Bash is a fundamental skill for anyone working in a technical information security role. Through the power of automation, we can unlock the Linux operating system's full potential and efficiently perform habitual tasks.

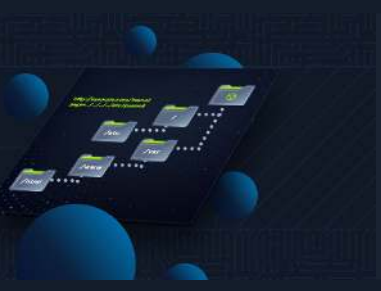
100% Completed

Active Directory LDAP

12 Sections | Medium | Offensive

This module provides an overview of Active Directory (AD), introduces core AD enumeration concepts, and covers enumeration with built-in tools.

100% Completed



File Inclusion

11 Sections | Medium | Offensive

File Inclusion is a common web application vulnerability, which can be easily overlooked as part of a web application's functionality.

100% Completed

File Transfers

10 Sections | Medium | Offensive

During an assessment, it is very common for us to transfer files to and from a target system. This module covers file transfer techniques leveraging tools commonly available across all versions of Windows and Linux systems.

100% Completed

Kerberos Attacks

23 Sections | Hard | Offensive

Kerberos is an authentication protocol that allows users to authenticate and access services on a potentially insecure network. Due to its prevalence throughout an Active Directory environment, it presents us with a significant attack surface when assessing internal networks. This module will explain how Kerberos works thoroughly and examines several scenarios to practice the most common attacks against it from multiple perspectives.

43.48% Completed

DNS Enumeration Using Python

11 Sections | Medium | General

As a penetration tester or red teamer, it is imperative that we understand the tools that we use inside and out and also have the ability to write out own, even simple, tools if we are on an assessment with certain constraints such as no internet or the requirement to use a customer provided host as our "attack box." A strong understanding of DNS as well as the various ways to interact with fundamental when performing any security assessment.

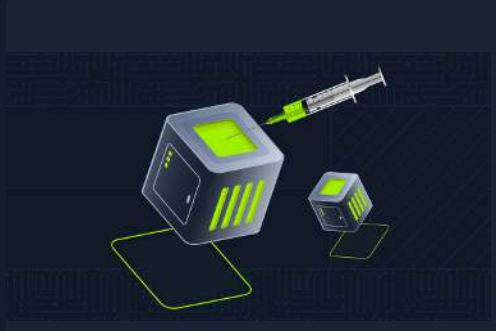
100% Completed

Stack-Based Buffer Overflows on Linux x86

13 Sections | Medium | Offensive

Buffer overflows are common vulnerabilities in software applications that can be exploited to achieve remote code execution (RCE) or perform a Denial-of-Service (DoS) attack. These vulnerabilities are caused by insecure coding, resulting in an attacker being able to overrun a program's buffer and overwrite adjacent memory locations, changing the program's execution path and resulting in unintended actions.

100% Completed



SQL Injection Fundamentals

17 Sections | Medium | Offensive

Databases are an important part of web application infrastructure and SQL (Structured Query Language) to store, retrieve, and manipulate information stored in them. SQL injection is a code injection technique used to take advantage of coding vulnerabilities and inject SQL queries via an application to bypass authentication, retrieve data from the back-end database, or achieve code execution on the underlying server.

100% Completed

Introduction to Networking

21 Sections | Fundamental | General

As an information security professional, a firm grasp of networking fundamentals and the required components is necessary. Without a strong foundation in networking, it will be tough to progress in any area of information security. Understanding how a network is structured and how the communication between the individual hosts and servers takes place using the various protocols allows us to understand the entire network structure and its network traffic in detail and how different communication standards are handled. This knowledge is essential to create our tools and to interact with the protocols.

100% Completed

Web Requests

8 Sections | Fundamental | General

This module introduces the topic of HTTP web requests and how different web applications utilize them to communicate with their backends.

100% Completed

Using the Metasploit Framework

15 Sections | Easy | Offensive

The Metasploit Framework is an open-source set of tools used for network enumeration, attacks, testing security vulnerabilities, evading detection, performing privilege escalation attacks, and performing post-exploitation.

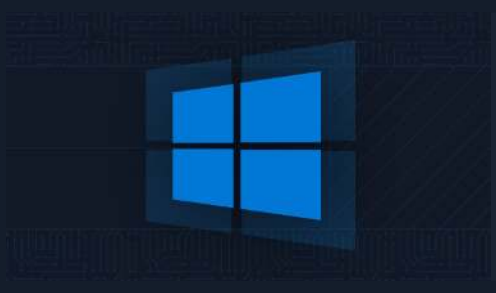
100% Completed

JavaScript Deobfuscation

11 Sections | Easy | Defensive

This module will take you step-by-step through the fundamentals of JavaScript Deobfuscation until you can deobfuscate basic JavaScript code and understand its purpose.

100% Completed

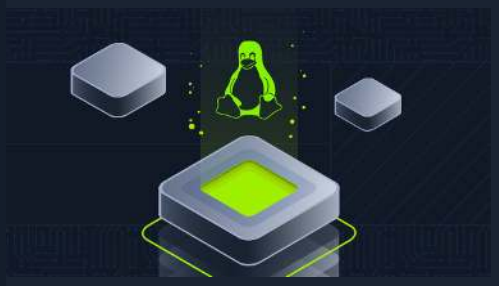


Windows Fundamentals

14 Sections | Fundamental | General

This module covers the fundamentals required to work comfortably with the Windows operating system.

100% Completed



Linux Privilege Escalation

28 Sections | Easy | Offensive

Privilege escalation is a crucial phase during any security assessment. During this phase, we attempt to gain access to additional users, hosts, and resources to move closer to the assessment's overall goal. There are many ways to escalate privileges. This module aims to cover the most common methods emphasizing real-world misconfigurations and flaws that we may encounter in a client environment. The techniques covered in this module are not an exhaustive list of all possibilities and aim to avoid extreme "edge-case" tactics that may be seen in a Capture the Flag (CTF) exercise.

100% Completed

Attacking Web Applications with Ffuf

13 Sections | Easy | Offensive

This module covers the fundamental enumeration skills of web fuzzing and directory brute forcing using the Ffuf tool. The techniques learned in this module will help us in locating hidden pages, directories, and parameters when targeting web applications.

100% Completed

Login Brute Forcing

13 Sections | Easy | Offensive

The module contains an exploration of brute-forcing techniques, including the use of tools like Hydra and Medusa, and the importance of strong password practices. It covers various attack scenarios, such as targeting SSH, FTP, and web login forms.

100% Completed

SQLMap Essentials

11 Sections | Easy | Offensive

The SQLMap Essentials module will teach you the basics of using SQLMap to discover various types of SQL Injection vulnerabilities, all the way to the advanced enumeration of databases to retrieve all data of interest.

100% Completed

Windows Privilege Escalation

33 Sections | Medium | Offensive

After gaining a foothold, elevating our privileges will provide more options for persistence and may reveal information stored locally that can further our access in the environment. Enumeration is the key to privilege escalation. When you gain initial shell access to the host, it is important to gain situational awareness and uncover details relating to the OS version, patch level, any installed software, our current privileges, group memberships, and more. Windows presents an enormous attack surface and, being that most companies run Windows hosts in some way, we will more often than not find ourselves gaining access to Windows machines during our assessments. This covers common methods while emphasizing real-world misconfigurations and flaws that we may encounter during an assessment. There are many additional "edge-case" possibilities not covered in this module. We will cover both modern and legacy Windows Server and Desktop versions that may be present in a client environment.

100% Completed

Active Directory PowerView

9 Sections | Medium | Offensive

This module covers AD enumeration focusing on the PowerView and SharpView tools. We will cover various techniques for enumerating key AD objects that will inform our attacks in later modules.

100% Completed

Active Directory BloodHound

14 Sections | Medium | Offensive

This module covers AD enumeration focusing on the BloodHound tool. We will cover various techniques for enumerating key AD objects that will inform our attacks in later modules.

100% Completed

Introduction to Active Directory

16 Sections | Fundamental | General

Active Directory (AD) is present in the majority of corporate environments. Due to its many features and complexity, it presents a vast attack surface. To be successful as penetration testers and information security professionals, we must have a firm understanding of Active Directory fundamentals, AD structures, functionality, common AD flaws, misconfigurations, and defensive measures.

100% Completed

Introduction to Web Applications

17 Sections | Fundamental | General

In the Introduction to Web Applications module, you will learn all of the basics of how web applications work and begin to look at them from an information security perspective.

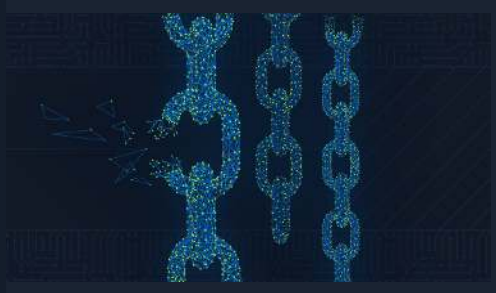
100% Completed

Getting Started

23 Sections | Fundamental | Offensive

This module covers the fundamentals of penetration testing and an introduction to Hack The Box.

100% Completed



Broken Authentication

14 Sections | Medium | Offensive

Authentication is probably the most straightforward and prevalent measure used to secure access to resources, and it's the first line of defense against unauthorized access. Broken authentication is listed as #7 on the 2021 OWASP Top 10 Web Application Security Risks, falling under the broader category of Identification and Authentication failures. A vulnerability or misconfiguration at the authentication stage can impact an application's overall security.

100% Completed

Intro to Network Traffic Analysis

15 Sections | Medium | General

Network traffic analysis is used by security teams to monitor network activity and look for anomalies that could indicate security and operational issues. Offensive security practitioners can use network traffic analysis to search for sensitive data such as credentials, hidden applications, reachable network segments, or other potentially sensitive information "on the wire." Network traffic analysis has many uses for attackers and defenders alike.

100% Completed

Intro to Assembly Language

24 Sections | Medium | General

This module builds the core foundation for Binary Exploitation by teaching Computer Architecture and Assembly language basics.

100% Completed

Setting Up

22 Sections | Fundamental | General

This module covers topics that will help us be better prepared before conducting penetration tests. Preparations before a penetration test can often take a lot of time and effort, and this module shows how to prepare efficiently.

100% Completed

Introduction to Python 3

14 Sections | Easy | General

Automating tedious or otherwise impossible tasks is highly valued during both penetration testing engagements and everyday life. Introduction to Python 3 aims to introduce the student to the world of scripting with Python 3 and covers the essential building blocks needed for a beginner to understand programming. Some advanced topics are also covered for the more experienced student. In a guided fashion and starting soft, the final goal of this module is to equip the reader with enough know-how to be able to implement simple yet useful pieces of software.

100% Completed

Stack-Based Buffer Overflows on Windows x86

11 Sections | Medium | Offensive

This module is your first step into Windows Binary Exploitation, and it will teach you how to exploit local and remote buffer overflow vulnerabilities on Windows machines.

100% Completed

Penetration Testing Process

15 Sections | Fundamental | General

This module teaches the penetration testing process broken down into each stage and discussed in detail. We will cover many aspects of the role of a penetration tester during a penetration test, explained and illustrated with detailed examples. The module also covers pre-engagement steps like the criteria for establishing a contract with a client for a penetration testing engagement.

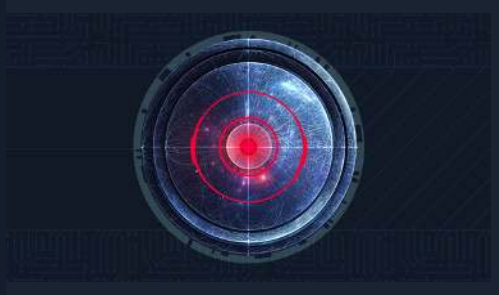
100% Completed

Cross-Site Scripting (XSS)

10 Sections | Easy | Offensive

Cross-Site Scripting (XSS) vulnerabilities are among the most common web application vulnerabilities. An XSS vulnerability may allow an attacker to execute arbitrary JavaScript code within the target's browser and result in complete web application compromise if chained together with other vulnerabilities. This module will teach you how to identify XSS vulnerabilities and exploit them.

100% Completed



Vulnerability Assessment

17 Sections | Easy | Offensive

This module introduces the concept of Vulnerability Assessments. We will review the differences between vulnerability assessments and penetration tests, how to carry out a vulnerability assessment, how to interpret the assessment results, and how to deliver an effective vulnerability assessment report.

100% Completed

Command Injections

12 Sections | Medium | Offensive

Command injection vulnerabilities can be leveraged to compromise a hosting server and its entire network. This module will teach you how to identify and exploit command injection vulnerabilities and how to use various filter bypassing techniques to avoid security mitigations.

100% Completed

Using Web Proxies

15 Sections | Easy | Offensive

Web application penetration testing frameworks are an essential part of any web penetration test. This module will teach you two of the best frameworks: Burp Suite and OWASP ZAP.

100% Completed

Footprinting

21 Sections | Medium | Offensive

This module covers techniques for footprinting the most commonly used services in almost all enterprise and business IT infrastructures. Footprinting is an essential phase of any penetration test or security audit to identify and prevent information disclosure. Using this process, we examine the individual services and attempt to obtain as much information from them as possible.

100% Completed

Attacking Common Applications

33 Sections | Medium | Offensive

Penetration Testers can come across various applications, such as Content Management Systems, custom web applications, internal portals used by developers and sysadmins, and more. It's common to find the same applications across many different environments. While an application may not be vulnerable in one environment, it may be misconfigured or unpatched in the next. It is important as an assessor to have a firm grasp of enumerating and attacking the common applications discussed in this module. This knowledge will help when encountering other types of applications during assessments.

100% Completed

Shells & Payloads

17 Sections | Medium | Offensive

Gain the knowledge and skills to identify and use shells & payloads to establish a foothold on vulnerable Windows & Linux systems. This module utilizes a fictitious scenario where the learner will place themselves in the perspective of a sysadmin trying out for a position on CAT5 Security's network penetration testing team.

100% Completed

Attacking Common Services

19 Sections | Medium | Offensive

Organizations regularly use a standard set of services for different purposes. It is vital to conduct penetration testing activities on each service internally and externally to ensure that they are not introducing security threats. This module will cover how to enumerate each service and test it against known vulnerabilities and exploits with a standard set of tools.

100% Completed

Web Attacks

18 Sections | Medium | Offensive

This module covers three common web vulnerabilities, HTTP Verb Tampering, IDOR, and XXE, each of which can have a significant impact on a company's systems. We will cover how to identify, exploit, and prevent each of them through various methods.

100% Completed

File Upload Attacks

11 Sections | Medium | Offensive

Arbitrary file uploads are among the most critical web vulnerabilities. These flaws enable attackers to upload malicious files, execute arbitrary commands on the back-end server, and even take control over the entire server and all web applications hosted on it and potentially gain access to sensitive data or cause a service disruption.

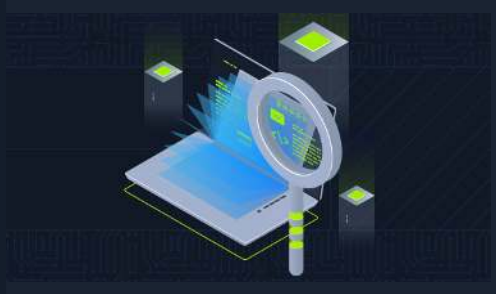
100% Completed

Active Directory Enumeration & Attacks

36 Sections | Medium | Offensive

Active Directory (AD) is the leading enterprise domain management suite, providing identity and access management, centralized domain administration, authentication, and much more. Due to the many features and complexity of AD, it presents a large attack surface that is difficult to secure properly. To be successful as infosec professionals, we must understand AD architectures and how to secure our enterprise environments. As Penetration testers, having a firm grasp of what tools, techniques, and procedures are available to us for enumerating and attacking AD environments and commonly seen AD misconfigurations is a must.

100% Completed

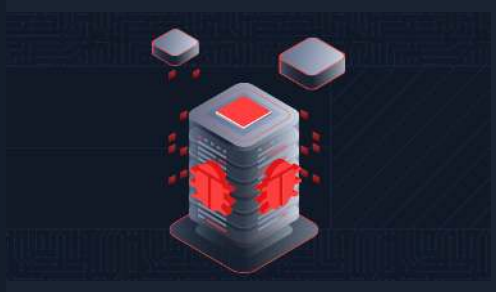


Information Gathering - Web Edition

19 Sections | Easy | Offensive

This module equips learners with essential web reconnaissance skills, crucial for ethical hacking and penetration testing. It explores both active and passive techniques, including DNS enumeration, web crawling, analysis of web archives and HTTP headers, and fingerprinting web technologies.

100% Completed



Server-side Attacks

19 Sections | Medium | Offensive

A backend that handles user-supplied input insecurely can lead to devastating security vulnerabilities such as sensitive information disclosure and remote code execution. This module covers how to identify and exploit server-side bugs, including Server-Side Request Forgery (SSRF), Server-Side Template Injection (SSTI), and Server-Side Includes (SSI) injection attacks.

100% Completed

Password Attacks

26 Sections | Medium | Offensive

Passwords are still the primary method of authentication in corporate networks. If strong password policies are not enforced, users often choose weak, easy-to-remember passwords that can be cracked offline and leveraged to escalate access. As penetration testers, we encounter passwords in many forms during our assessments. It's essential to understand how passwords are stored, how they can be retrieved, methods for cracking weak passwords, techniques for using hashes that cannot be cracked, and how to identify weak or default password usage.

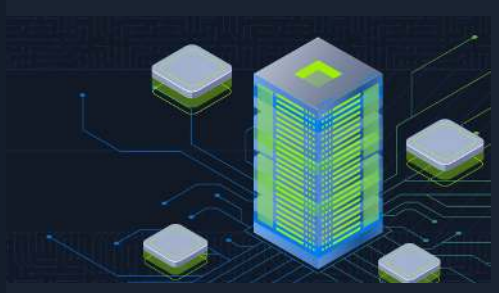
100% Completed

Incident Handling Process

11 Sections | Easy | General

Security Incident handling has become a vital part of every organization's defensive strategy, as attacks constantly evolve and successful compromises are becoming a daily occurrence. In this module, we will review the process of handling an incident from the very early stage of detecting a suspicious event to confirming a compromise and responding to it.

100% Completed



Session Security

14 Sections | Medium | Offensive

Maintaining and keeping track of a user's session is an integral part of web applications. It is an area that requires extensive testing to ensure it is set up robustly and securely. This module covers the most common attacks and vulnerabilities that can affect web application sessions, such as Session Hijacking, Session Fixation, Cross-Site Request Forgery, Cross-Site Scripting, and Open Redirects.

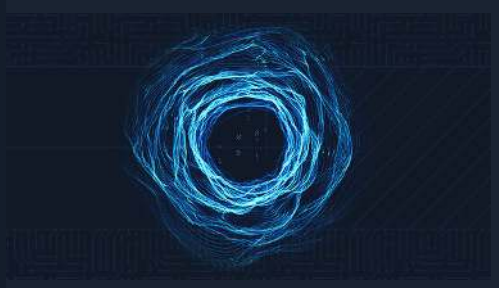
100% Completed

MacOS Fundamentals

11 Sections | Fundamental | General

This module covers the fundamentals required to work comfortably within the macOS operating system and shell.

100% Completed

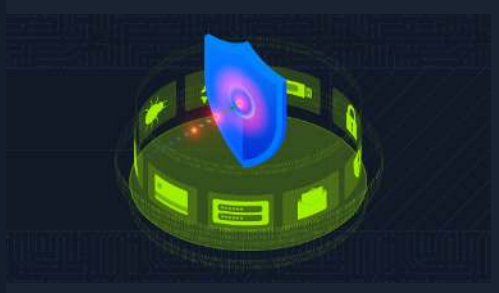


Pivoting, Tunneling, and Port Forwarding

18 Sections | Medium | Offensive

Once a foothold is gained during an assessment, it may be in scope to move laterally and vertically within a target network. Using one compromised machine to access another is called pivoting and allows us to access networks and resources that are not directly accessible to us through the compromised host. Port forwarding accepts the traffic on a given IP address and port and redirects it to a different IP address and port combination. Tunneling is a technique that allows us to encapsulate traffic within another protocol so that it looks like a benign traffic stream.

100% Completed



Web Service & API Attacks

13 Sections | Medium | Offensive

Web services and APIs are frequently exposed to provide certain functionalities in a programmatic way between heterogeneous devices and software components. Both web services and APIs can assist in integrating different applications or facilitate separation within a given application. This module covers how to identify the functionality a web service or API offers and exploit any security-related inefficiencies.

100% Completed

Bug Bounty Hunting Process

6 Sections | Easy | General

Bug bounty programs encourage security researchers to identify bugs and submit vulnerability reports. Getting into the world of bug bounty hunting without any prior experience can be a daunting task, though. This module covers the bug bounty hunting process to help you start bug bounty hunting in an organized and well-structured way. It's all about effectiveness and professionally communicating your findings.

100% Completed

Documentation & Reporting

8 Sections | Easy | General

Proper documentation is paramount during any engagement. The end goal of a technical assessment is the report deliverable which will often be presented to a broad audience within the target organization. We must take detailed notes and be very organized in our documentation, which will help us in the event of an incident during the assessment. This will also help ensure that our reports contain enough detail to illustrate the impact of our findings properly.

100% Completed

Attacking Enterprise Networks

14 Sections | Medium | Offensive

We often encounter large and complex networks during our assessments. We must be comfortable approaching an internal or external network, regardless of the size, and be able to work through each phase of the penetration testing process to reach our goal. This module will guide students through a simulated penetration testing engagement, from start to finish, with an emphasis on hands-on testing steps that are directly applicable to real-world engagements.

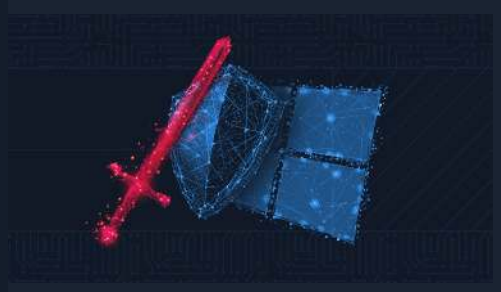
100% Completed

Introduction to Windows Command Line

23 Sections | Easy | General

As administrators and Pentesters, we may not always be able to utilize a graphical user interface for the actions we need to perform. Introduction to Windows Command Line aims to introduce students to the wide range of uses for Command Prompt and PowerShell within a Windows environment. We will cover basic usage of both key executables for administration, useful PowerShell cmdlets and modules, and different ways to leverage these tools to our benefit.

100% Completed



Windows Attacks & Defense

16 Sections | Medium | Purple

Microsoft Active Directory (AD) has been, for the past 20+ years, the leading enterprise domain management suite, providing identity and access management, centralized domain administration, authentication, and much more. Throughout those years, the more integrated our applications and data have become with AD, the more exposed to a large-scale compromise we have become. In this module, we will walk through the most commonly abused and fruitful attacks against Active Directory environments that allow threat actors to perform horizontal and vertical privilege escalations in addition to lateral movement. One of the module's core goals is to showcase prevention and detection methods against the covered Active Directory attacks.

100% Completed

Wired Equivalent Privacy (WEP) Attacks

13 Sections | Medium | Offensive

In this module, we delve into Wired Equivalent Privacy (WEP) and the various attacks that can compromise it. We'll explore how to identify access points configured with WEP and demonstrate different methods to exploit its vulnerabilities. As WEP is an outdated and insecure protocol, understanding its weaknesses is crucial for recognizing the need to upgrade to more secure protocols. This module aims to provide insights into WEP's vulnerabilities and practical techniques for testing its security.

100% Completed

Attacking Wi-Fi Protected Setup (WPS)

13 Sections | Medium | Offensive

In this module, we delve into the intricacies of WPS, uncovering the common vulnerabilities that plague this technology. From brute-force attacks to more sophisticated exploitation techniques, we will explore how attackers compromise WPS-enabled networks. By understanding these vulnerabilities and their related attacks, you will gain the knowledge necessary to protect your networks and mitigate the risks associated with WPS.

100% Completed

Android Fundamentals

20 Sections | Fundamental | General

This module introduces fundamental concepts of the Android environment, focusing on the operating system, its security features, and the structure of applications. It provides students with details about the different styles of application development and familiarizes them with their development environment. This module also explains how apps communicate in the Android environment, highlighting why this is critical information for their security. Students are also introduced to setting up a testing environment to prepare for the Application Penetration Testing process.

100% Completed

Security Monitoring & SIEM Fundamentals

11 Sections | Easy | Defensive

This module provides a concise yet comprehensive overview of Security Information and Event Management (SIEM) and the Elastic Stack. It demystifies the essential workings of a Security Operation Center (SOC), explores the application of the MITRE ATT&CK framework within SOCs, and introduces SIEM (KQL) query development. With a focus on practical skills, students will learn how to develop SIEM use cases and visualizations using the Elastic Stack.

100% Completed

Introduction to Threat Hunting & Hunting With Elastic

6 Sections | Medium | Defensive

This module initially lays the groundwork for understanding Threat Hunting, ranging from its basic definition, to the structure of a threat hunting team. The module also dives into the threat hunting process, highlighting the interrelationships between threat hunting, risk assessment, and incident handling. Furthermore, the module elucidates the fundamentals of Cyber Threat Intelligence (CTI). It expands on the different types of threat intelligence and offers guidance on effectively interpreting a threat intelligence report. Finally, the module puts theory into practice, showcasing how to conduct threat hunting using the Elastic stack. This practical segment uses real-world logs to provide learners with hands-on experience.

100% Completed

Windows Event Logs & Finding Evil

6 Sections | Medium | Defensive

This module covers the exploration of Windows Event Logs and their significance in uncovering suspicious activities. Throughout the course, we delve into the anatomy of Windows Event Logs and highlight the logs that hold the most valuable information for investigations. The module also focuses on utilizing Sysmon and Event Logs for detecting and analyzing malicious behavior. Additionally, we delve into Event Tracing for Windows (ETW), explaining its architecture and components, and provide ETW-based detection examples. To streamline the analysis process, we introduce the powerful Get-WinEvent cmdlet.

100% Completed

Understanding Log Sources & Investigating with Splunk

6 Sections | Medium | Defensive

This module provides a comprehensive introduction to Splunk, focusing on its architecture and the creation of effective detection-related SPL (Search Processing Language) searches. We will learn to investigate with Splunk as a SIEM tool and develop TTP-driven and analytics-driven SPL searches for enhanced threat detection and response. Through hands-on exercises, we will learn to identify and understand the ingested data and available fields within Splunk. We will also gain practical experience in leveraging Splunk's powerful features for security monitoring and incident investigation.

100% Completed

Wi-Fi Penetration Testing Basics

16 Sections | Medium | Offensive

In today's digital age, wireless networks are ubiquitous, connecting countless devices in homes, businesses, and public spaces. With this widespread connectivity comes an increased risk of security vulnerabilities that can be exploited by malicious actors. As such, understanding and securing Wi-Fi networks has become a crucial aspect of cybersecurity. Whether you are an aspiring ethical hacker, a network administrator, or simply a tech enthusiast, gaining a solid foundation in Wi-Fi penetration testing is essential for safeguarding your digital environment.

100% Completed

Working with IDS/IPS

11 Sections | Medium | Defensive

This module offers an in-depth exploration of Suricata, Snort, and Zeek, covering both rule development and intrusion detection. We'll guide you through signature-based and analytics-based rule development, and you'll learn to tackle encrypted traffic. The module features numerous hands-on examples, focusing on the detection of prevalent malware such as PowerShell Empire, Covenant, Sliver, Cerber, Dridex, Ursnif, and Patchwork. We also dive into detecting attacking techniques like DNS exfiltration, TLS/HTTP Exfiltration, PsExec lateral movement, and beaconing through IDS/IPS.

100% Completed

Introduction to Malware Analysis

9 Sections | Hard | Defensive

This module offers an exploration of malware analysis, specifically targeting Windows-based threats. The module covers Static Analysis utilizing Linux and Windows tools, Malware Unpacking, Dynamic Analysis (including malware traffic analysis), Reverse Engineering for Code Analysis, and Debugging using x64dbg. Real-world malware examples such as WannaCry, DoomJuice, Brbbot, Dharma, and Meterpreter are analyzed to provide practical experience.

100% Completed

Introduction to C#

21 Sections | Easy | General

Introduction to C# aims to provide a solid foundation to understand and work with C# code. Covering the crucial foundations and more intricate concepts, providing a comprehensive depth of knowledge in C#.

100% Completed

Intermediate Network Traffic Analysis

18 Sections | Easy | Defensive

Through network traffic analysis, this module sharpens skills in detecting link layer attacks such as ARP anomalies and rogue access points, identifying network abnormalities like IP spoofing and TCP handshake irregularities, and uncovering application layer threats from web-based vulnerabilities to peculiar DNS activities.

100% Completed

Brief Intro to Hardware Attacks

8 Sections | Medium | General

This mini-module concisely introduces hardware attacks, covering Bluetooth risks and attacks, Cryptanalysis Side-Channel Attacks, and vulnerabilities like Spectre and Meltdown. It delves into both historical and modern Bluetooth hacking techniques, explores the principles of cryptanalysis and different side-channel attacks, and outlines microprocessor design, optimisation strategies and vulnerabilities, such as Spectre and Meltdown.

100% Completed

Detecting Windows Attacks with Splunk

23 Sections | Medium | Defensive

This Hack The Box Academy module is focused on pinpointing attacks on Windows and Active Directory. Utilizing Splunk as the cornerstone for investigation, this training will arm participants with the expertise to adeptly identify Windows-based threats leveraging Windows Event Logs and Zeek network logs. Furthermore, participants will benefit from actual PCAP files associated with the discussed Windows and Active Directory attacks, enhancing their understanding of the respective attack patterns and techniques.

100% Completed

YARA & Sigma for SOC Analysts

11 Sections | Easy | Defensive

This Hack The Box Academy module covers how to create YARA rules both manually and automatically and apply them to hunt threats on disk, live processes, memory, and online databases. Then, the module switches gears to Sigma rules covering how to build Sigma rules, translate them into SIEM queries using "sigmac", and hunt threats in both event logs and SIEM solutions. It's all hands-on, using real-world malware and techniques.

100% Completed

Introduction to Digital Forensics

8 Sections | Medium | Defensive

Dive into Windows digital forensics with Hack The Box Academy's "Introduction to Digital Forensics" module. Gain mastery over core forensic concepts and tools such as FTK Imager, KAPE, Velociraptor, and Volatility. Dive deep into memory forensics, disk image analysis, and rapid triaging procedures. Learn to construct timelines from MFT, USN Journals, and Windows event logs while getting hands-on with key artifacts like MFT, USN Journal, Registry Hives, Prefetch Files, ShimCache, Amcache, BAM, and SRUM data.

100% Completed

Security Incident Reporting

5 Sections | Easy | General

Tailored to provide a holistic understanding, this Hack The Box Academy module ensures participants are adept at identifying, categorizing, and documenting security incidents with utmost accuracy and professionalism. The module meticulously breaks down the elements of a robust incident report and then presents participants with a real-world incident report, offering practical insights into the application of the concepts discussed.

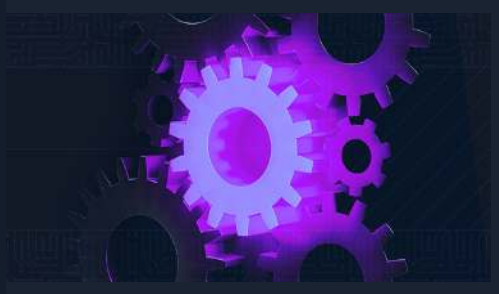
100% Completed

Introduction to Linux Forensics

15 Sections | Medium | Defensive

This module covers techniques for conducting digital forensics on Linux systems prevalent in enterprise servers and cloud infrastructures. Introduction to Linux forensics is critical for incident response and cyber investigations to preserve evidence, trace breaches, and support legal proceedings. Using this process, we examine key artifacts like logs, file metadata, and memory dumps to reconstruct timelines and attribute malicious actions.

60% Completed

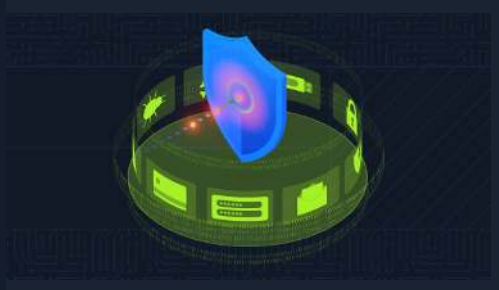


Intro to Academy's Purple Modules

14 Sections | Medium | Purple

This module will introduce you to HTB Academy's Purple modules, which bridge the gap between Offensive and Defensive modules and provide a holistic view of both the attacking and defending perspectives on the covered topics. More specifically, the Purple modules will allow for in-depth forensic analysis through detailed logging, traffic and memory capturing, and an installed DFIR toolset within each target after completing the attack part of each section.

100% Completed

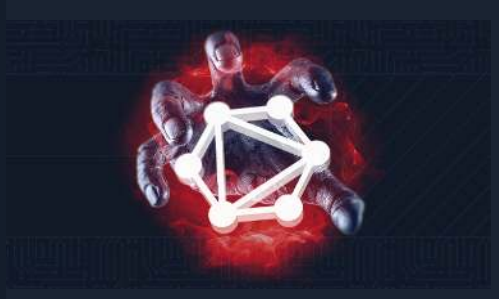


API Attacks

13 Sections | Medium | Offensive

Web APIs serve as crucial connectors across diverse entities in the modern digital landscape. However, their extensive functionality also exposes them to a range of potential attacks. This module introduces API Attacks, with a specific focus on the OWASP API Security Top 10 - 2023.

100% Completed



Attacking GraphQL

9 Sections | Medium | Offensive

GraphQL is a query language for APIs as an alternative to REST APIs. Clients are able to request data through GraphQL queries. If improperly configured or implemented, common web security vulnerabilities such as Information Disclosure, SQL Injection, and Insecure Direct Object Reference (IDOR) may arise.

100% Completed

Web Fuzzing

12 Sections | Easy | Offensive

In this module, we explore the essential techniques and tools for fuzzing web applications, an essential practice in cybersecurity for identifying hidden vulnerabilities and strengthening web application security.

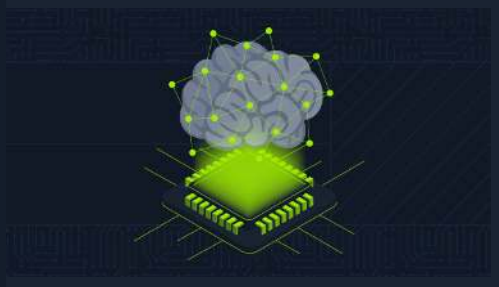
100% Completed

Network Foundations

12 Sections | Fundamental | General

This course introduces the basic concepts essential to understanding the world of networking. Students will learn about various network types such as LANs and WANs, discuss fundamental networking principles including the OSI and TCP/IP models, and explore key network components like routers and servers. The course also covers important topics such as IP addressing, network security, and internet architecture, providing a comprehensive overview of networking that is crucial for any IT professional.

100% Completed

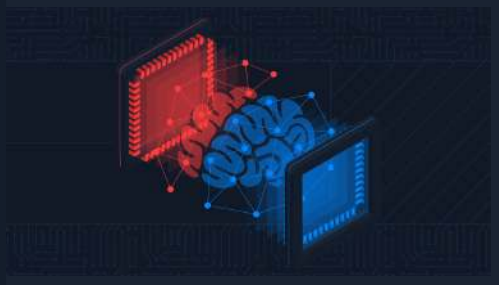


Fundamentals of AI

24 Sections | Medium | General

This module provides a comprehensive guide to the theoretical foundations of Artificial Intelligence (AI). It covers various learning paradigms, including supervised, unsupervised, and reinforcement learning, providing a solid understanding of key algorithms and concepts.

100% Completed

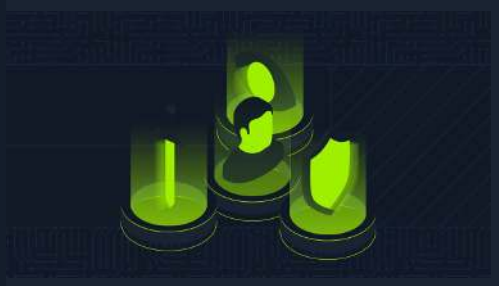


Applications of AI in InfoSec

25 Sections | Medium | General

This module is a practical introduction to building AI models that can be applied to various infosec domains. It covers setting up a controlled AI environment using Miniconda for package management and JupyterLab for interactive experimentation. Students will learn to handle datasets, preprocess and transform data, and implement structured workflows for tasks such as spam classification, network anomaly detection, and malware classification. Throughout the module, learners will explore essential Python libraries like Scikit-learn and PyTorch, understand effective approaches to dataset processing, and become familiar with common evaluation metrics, enabling them to navigate the entire lifecycle of AI model development and experimentation.

100% Completed



Introduction to Information Security

24 Sections | Fundamental | General

This theoretical module provides a comprehensive introduction to the foundational components of information security, focusing on the structure and operation of effective InfoSec frameworks. It explores the theoretical roles of security applications across networks, software, mobile devices, cloud environments, and operational systems, emphasizing their importance in protecting organizational assets. Students will gain an understanding of common threats, including malware and advanced persistent threats (APTs), alongside strategies for mitigating these risks. The module also introduces the roles and responsibilities of security teams and InfoSec professionals, equipping students with the confidence to advance their knowledge and explore specialized areas within the field.

100% Completed

Introduction to Red Teaming AI

11 Sections | Medium | Offensive

This module provides a comprehensive introduction to the world of red teaming Artificial Intelligence (AI) and systems utilizing Machine Learning (ML) deployments. It covers an overview of common security vulnerabilities in these systems and the types of attacks that can be launched against their components.

100% Completed

Introduction to Penetration Testing

21 Sections | Fundamental | Offensive

In this module, we will get into the fundamentals of penetration testing, a critical aspect of cybersecurity theory that explains how professionals in the field operate and underscores the significance of penetration testing within cybersecurity practices.

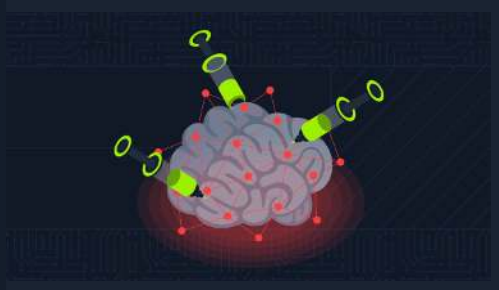
100% Completed

Pentest in a Nutshell

24 Sections | Easy | Offensive

This module focuses on providing a detailed, guided simulation of a real penetration test, emphasizing the fine details of the penetration testing process. It guides you through each step, from reconnaissance to exploitation, mirroring the techniques and methodologies used by professional penetration testers. It offers hands-on experience in a controlled environment and aims to deepen understanding and sharpen skills essential for effective cybersecurity assessments.

100% Completed



Prompt Injection Attacks

12 Sections | Medium | Offensive

This module comprehensively introduces one of the most prominent attacks on large language models (LLMs): Prompt Injection. It introduces prompt injection basics and covers detailed attack vectors based on real-world vulnerability reports. Furthermore, the module touches on academic research in the fields of novel prompt injection techniques and jailbreaks.

83.33% Completed

AI Data Attacks

25 Sections | Hard | Offensive

This module explores the intersection of Data and Artificial Intelligence, exposing how vulnerabilities within AI data pipelines can be exploited, ultimately aiming to degrade performance, achieve specific misclassifications, or execute arbitrary code.

64% Completed

Active Directory Hardening - Recon & Initial Access

8 Sections | Medium | Defensive

Active Directory (AD) presents a vast attack surface and can be challenging to secure and control. Small changes can have a cascading effect, introducing further issues into the environment. Novel attacks are released periodically, taking advantage of vulnerabilities and abusing default configurations. This module covers remediating common AD findings uncovered during penetration tests and best practices for AD hardening and ongoing maintenance, logging, and detection.

100% Completed

LLM Output Attacks

14 Sections | Medium | Offensive

In this module, we will explore different LLM output vulnerabilities resulting from improper handling of LLM outputs and insecure LLM applications. We will also touch on LLM abuse attacks, such as hate speech campaigns and misinformation generation, with a particular focus on the detection and mitigation of these attacks.

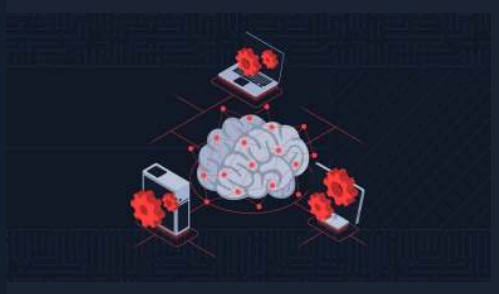
78.57% Completed

Wi-Fi Password Cracking Techniques

16 Sections | Medium | Offensive

Password cracking is a cornerstone of wireless penetration testing, as many real-world assessments hinge on the strength of the Wi-Fi password and our ability to break it. Despite its importance, many testers continue to rely solely on dictionary attacks with basic tools and minimal customization. In this module, we'll go beyond the basics and explore the full spectrum of practical techniques, targeted strategies, and performance-driven optimizations for cracking Wi-Fi passwords.

100% Completed



Attacking AI - Application and System

14 Sections | Medium | Offensive

In this module, we will explore security vulnerabilities in the application and system components of AI deployments. We will also discuss the Model Context Protocol (MCP), an orchestration protocol for AI deployments introduced in 2024, including a deep dive into how the protocol works and how security vulnerabilities may arise.

78.57% Completed

AI Evasion - Foundations

12 Sections | Medium | Offensive

This module explores the foundations of inference-time evasion attacks against AI models, showing how to manipulate inputs to bypass classifiers and force targeted misclassifications in white- and black-box settings.

91.67% Completed

AI Evasion - First-Order Attacks

23 Sections | Hard | Offensive

This module explores gradient-based adversarial attacks that manipulate neural network inputs at inference time, showing how to craft perturbations that cause misclassification through white-box access to model gradients.

21.74% Completed

AI Evasion - Sparsity Attacks

28 Sections | Hard | Offensive

This module explores sparsity-constrained adversarial attacks that minimize the number of modified input features rather than perturbation magnitude, showing how to craft targeted misclassifications by changing only the most impactful pixels through L0-focused optimization and saliency-guided feature selection.

10.71% Completed

AI Defense

21 Sections | Medium | Defensive

In this module, we will explore how to defend AI applications from the attack vectors discussed in the AI Red Teamer path. We will examine adversarial training, adversarial tuning, and LLM guardrails, including the fundamental concepts and practical implementation of these defensive measures.

90.48% Completed

AI Privacy

21 Sections | Medium | Defensive

This module explores privacy attacks against machine learning models and the differential privacy defenses that protect models from such attacks.

52.38% Completed