

Paths completed: 3
Targets compromised: 298
Ranking: Top 1%

PATHS COMPLETED

PROGRESS

Bug Bounty Hunter

20 Modules Medium

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

100% Completed

100% Completed

100% Completed

PROGRESS

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.

AI Red Teamer

7 Modules Hard

The AI Red Teamer Job Role Path, in collaboration with Google, trains cybersecurity professionals to assess, exploit, and secure AI systems. Covering prompt injection, model privacy attacks, adversarial AI, supply chain risks, and deployment threats, it combines theory with hands-on exercises. Aligned with Google's Secure AI Framework (SAIF), it ensures relevance to real-world AI security challenges. Learners will gain skills to manipulate model behaviors, develop AI-specific red teaming strategies, and perform offensive security testing against AI-driven applications. The path will be gradually expanded with related modules until its completion.

MODULE

PROGRESS

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.

Hacking WordPress



Hacking WordPress

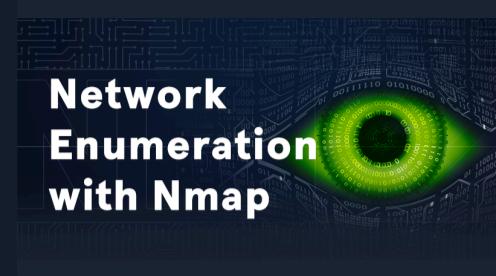
16 Sections Easy Offensive

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

100% Completed



Network Enumeration with Nmap

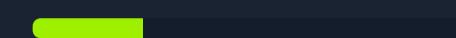


Network Enumeration with Nmap

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.

25% Completed



Introduction to Bash Scripting



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



SQL Injection Fundamentals



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



Web Requests



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



File Inclusion



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



Introduction to Networking



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



JavaScript Deobfuscation



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





Attacking Web Applications with Ffuf

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

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

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



Introduction to Web Applications

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



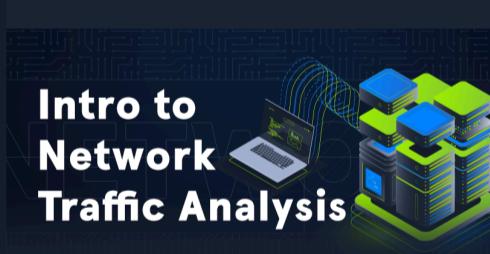
Broken Authentication

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

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



Cross-Site Scripting (XSS)

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



Command Injections

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

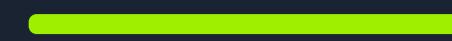


Using Web Proxies

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



Shells & Payloads

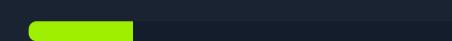


Shells & Payloads

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.

23.53% Completed



Web Attacks



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



Information Gathering - Web Edition



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



File Upload Attacks



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



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.

47.22% Completed



Server-side Attacks



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



Incident Handling Process



Incident Handling Process

9 Sections Fundamental General

Security Incident handling has become a vital part of each 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



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



Web Service & API Attacks

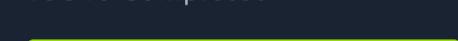


Web Service & API Attacks

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



Bug Bounty Hunting Process

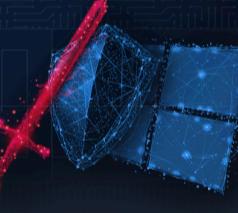
6 Sections Easy General

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



Windows Attacks & Defense

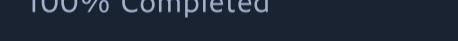


Windows Attacks & Defense

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



Security Monitoring & SIEM Fundamentals



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

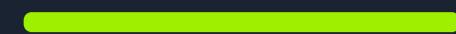


Introduction to Threat Hunting & Hunting With Elastic

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

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

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



Working with IDS/IPS

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



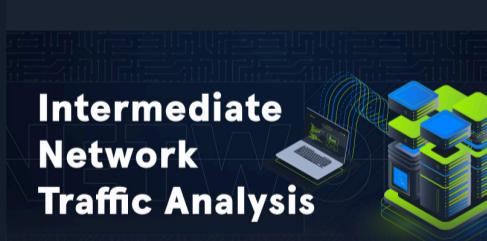
Intermediate Network Traffic Analysis

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



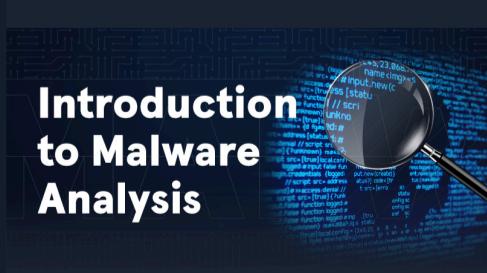
Introduction to Malware Analysis

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



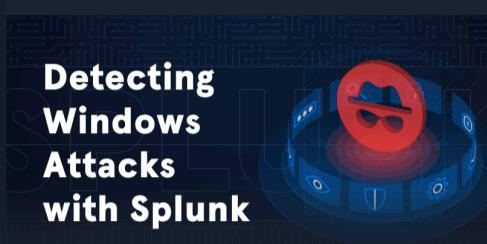


YARA & Sigma for SOC Analysts

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



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



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 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



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



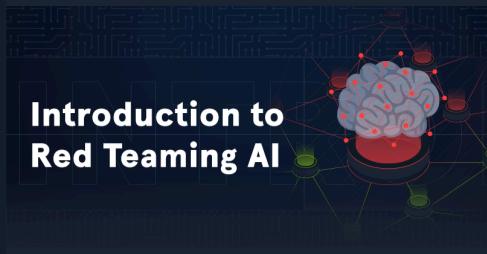
Applications of AI in InfoSec

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 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



Prompt Injection Attacks

11 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.

100% 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.

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.

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.

100% Completed

