#578867



Paths completed: 1 Targets compromised: 98 Ranking: Top 5%

Student Transcript

PATHS COMPLETED

**PROGRESS** 



## **Operating System Fundamentals**

2 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

MODULE



# Introduction to Academy

8 Sections Fundamental General

This module is recommended for new users. It allows users to become acquainted with the platform and the learning process.

100% Completed

**PROGRESS** 

Learning **Process** 



# **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



## 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

# **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



# **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 backend database, or achieve code execution on the underlying server.

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



#### 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



# 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



#### 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.

75% Completed



# Login Brute Forcing

11 Sections Easy Offensive

Learn how to brute force logins for various types of services and create custom wordlists based on your target.

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



## 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



#### 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

Attacking Common Applications



#### 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.

3.03% Completed

Attacking Common Services



# **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

94.74% 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

36.11% Completed

Password Attacks

## Password Attacks

22 Sections Medium Offensive

Passwords are still the primary method of authentication in corporate networks. If strong password policies are not in place, users will often opt for weak, easy-to-remember passwords that can often be cracked offline and used to further our access. We will encounter passwords in many forms during our assessments. We must understand the various ways they are stored, how they can be retrieved, methods to crack weak passwords, ways to use hashes that cannot be cracked, and hunting for weak/default password usage.

9.09% Completed