

CB103



## **Microsoft Security**

### Outline

In this course, students will learn about the Windows Server 2016 operating system. Countless companies throughout the world rely on the Windows Server to manage their organization's computers. Students will be taught how to set up domain environments using Active Directory, which enables central control of all computers and users in a domain. This course will also cover how to manage network services, such as DNS and DHCP servers, & the differences between Windows Server 2016 and newer versions, such as 2019.

In addition, the lessons will include the security aspects & hardening of those environments & systems.



### Target Audience

Technically-savvy or IT-related professionals who want to sharpen their skills in the IT world.



### Prerequisites

Before attending this course, students must have:

- Experience working with Windows clients 7, 8, 8.1, or 10.
- Basic understanding of virtual environments.
- Basic knowledge of networking.



### Objectives

The objectives of the course are to teach students about the Windows server and equip them with solid knowledge and hands-on experience in Windows server environments.

Upon course completion, participants will be able to:

- Install Windows server 2016.
- Create and manage domain environments.
- Configure advanced features of the Dynamic Host Configuration Protocol (DHCP) & IP addresses.
- Configure Domain Name System (DNS) services.
- Create basic PowerShell scripts.
- I Implement group policies.
- Harden Microsoft operating systems.



## 1 Introduction to Windows Client

- Networking Review
- Windows Environment
- Client Configuration
- I Introduction to CM D
- Users and Groups
- Remote Connection
- Windows Maintenance
- I Client Security Features

### <sup>Day</sup> 1 Windows Server 2012 & Enterprise Creation

- Windows Server 2012 Overview
- Installation
- Configuration

## 1 Active Directory

- Fundamentals
- Active Directory Objects
- Server Core Configuration



- Fundamentals
- I DNS Zones and Records
- DNS Configuration
- Link-Local Multicast Name Resolution

## PowerShell

- PowerShell Fundamentals
- PowerShell as a Tool
- PowerShell for Active Directory
- PowerShell as a Weapon

#### Bay **Module 06** 3 Group Policy

- GPO Introduction
- GPO Management
- I Group Policy Management Editor
- I WMI Filters & Troubleshooting
- Additional GPO Extensions

## 3 Shares and Permissions

- File Sharing
- NTFS Permissions
- Distributed File System

## A DHCP

- Introduction
- I DHCP Installation
- I DHCP Configuration
- DHCP Failover

### <sup>Day</sup> Disk Management

- MBR vs GPT
- Basic vs Dynamic Disk
- Dynamic Disk Features
- RAID

77

- Disk Management Tool
- I Disk Partition Commands
- File Server Resource Manager

#### 5 Module 10 Microsoft Endpoint Security

- Host Encryption
- AppLocker
- Windows Firewall

### 5 Security Policies & Authentication

- Network Operation Hardening
- Account Security Policies
- I Local Security Policies
- Additional Security Measures
- NTLM Authentication
- Kerberos Authentication

#### <sup>Day</sup> 5 Project Final

- Final Project overview
- I Troubleshoot

Set up domain environments using Active Directory, which enables central **control of all computers and users** in a domain"



# The HackerU Advantage

We have unparalleled experience in building advanced training programs for companies and organizations around the world – Talk to one of our experts and find out why.

Handcrafted **Training Programs** 



State-Of-The-Art Learning Materials

**Israel's Premier Training Center** 



**Fueled by Industry Leading Cyber Experts** 



**Over 20 Years** of Proven IT-**Education Success** 





www.hackerupro.com