

DURATION: 5 days**COURSE:** 20743**COURSE OBJECTIVE**

After completing the training, the participants will be able to:

- Install and configure Windows Server 2016.
- Describe storage in Windows Server 2016.
- Implement directory services.
- Implement Active Directory Federation Services (AD FS).
- Describe networking.
- Implement Hyper-V.
- Configure advanced networking features.
- Implement software-defined networking.
- Implement remote access.
- Deploy and manage Windows and Hyper-V containers.
- Implement failover clustering.
- Implement failover clustering by using virtual machines.

WHO SHOULD ATTEND

This course is for IT professionals who are experienced Windows Server 2012 or Windows Server 2008 system administrators, with real-world experience working in a Windows Server 2008 R2 or Windows Server 2008 enterprise environment. Additionally, students should have obtained the MCSA credential for Windows Server 2008 or Windows Server 2012, or they should have equivalent knowledge.

20743 - Upgrading Your Skills to MCSA: Windows Server 2016

INTRODUCTION

This five-day, instructor-led course explains how to implement and configure new Windows Server 2016 features and functionality. This course is for information technology (IT) professionals who want to upgrade their technical skills from Windows Server 2008 or Windows Server 2012 to Windows Server 2016. This course presumes a high level of knowledge about previous Windows Server technologies and skills equivalent to the Microsoft Certified Solutions Associate (MCSA): Windows Server 2008 or Windows Server 2012 credential.

COURSE OUTLINE**Module 1: Installing and configuring Windows Server 2016**

- Introducing Windows Server 2016
- Installing Windows Server 2016
- Configuring Windows Server 2016
- Preparing for upgrades and migrations
- Migrating server roles and workloads
- Windows Server activation models

Module 2: Overview of storage in Windows Server 2016

- Overview of storage in Windows Server 2016
- Implementing Data Deduplication
- Configuring iSCSI storage
- Configuring the Storage Spaces feature in Windows Server 2016

Module 3: Implementing Directory Services

- Deploying Active Directory domain controllers
- Implementing service accounts

- Azure AD

Module 4: Implementing AD FS

- Overview of AD FS
- Deploying AD FS
- Implementing AD FS for a single organization
- Implementing Web Application Proxy
- Implementing SSO with Microsoft Online Services

Module 5: Implementing network services

- Overview of networking enhancements
- Implementing IPAM
- Managing IP address spaces with IPAM

Module 6: Implementing Hyper-V

- Configuring the Hyper-V role in Windows Server 2016
- Configuring Hyper-V storage
- Configuring Hyper-V networking
- Configuring Hyper-V virtual machines

PRE-REQUISITES

Before attending this course, students must have:

- Two or more years of experience with deploying and managing Windows Server 2012 or Windows Server 2008 environments; NS experience with day-to-day Windows Server 2012 or Windows Server 2008 system-administration management and maintenance tasks.
- Experience with Windows networking technologies and implementation.
- Experience with Active Directory technologies and implementation.
- Experience with Windows Server virtualization technologies and implementation.
- Knowledge equivalent to the MCSA credentials of Windows Server 2008 or Windows Server 2012.

Module 7: Configuring advanced networking features

- Overview of high-performance networking features
- Configuring advanced Hyper-V networking features

Module 8: Implementing Software Defined Networking

- Overview of Software Defined Networking
- Implementing network virtualization
- Implementing Network Controller

Module 9: Implementing remote access

- Remote access overview
- Implementing DirectAccess
- Implementing VPN

Module 10: Deploying and managing Windows Server and Hyper-V containers

- Overview of containers in Windows Server 2016
- Deploying Windows Server and Hyper-V containers
- Installing, configuring, and managing containers by using Docker

Module 11: Implementing failover clustering

- Overview of failover clustering
- Implementing a failover cluster
- Configuring highly-available applications and services on a failover cluster
- Maintaining a failover cluster
- Implementing a stretch cluster

Module 12: Implementing failover clustering with Windows Server 2016 Hyper-V

- Overview of the integration of Hyper-V Server 2016 with failover clustering
- Implementing Hyper-V virtual machines on failover clusters
- Implementing Windows Server 2016 Hyper-V virtual machine migration
- Implementing Hyper-V Replica