

## 20742: Identity with Windows Server 2016 (5 Days)

### About this Course

This five-day instructor-led course teaches IT Pros how to deploy and configure Active Directory Domain Services (AD DS) in a distributed environment, how to implement Group Policy, how to perform backup and restore, and how to monitor and troubleshoot Active Directory–related issues with Windows Server 2016. Additionally, this course teaches how to deploy other Active Directory server roles such as Active Directory Federation Services (AD FS) and Active Directory Certificate Services (AD CS).

### Audience Profile

This course is primarily intended for existing IT professionals who have some AD DS knowledge and experience and who aim to develop knowledge about identity and access technologies in Windows Server 2016. This would typically include:

- AD DS administrators who are looking to train in identity and access technologies with Windows Server 2012 or Windows Server 2016.
- System or infrastructure administrators with general AD DS experience and knowledge who are looking to cross-train in core and advanced identity and access technologies in Windows Server 2012 or Windows Server 2016.

The secondary audience for this course includes IT professionals who are looking to consolidate their knowledge about AD DS and related technologies, in addition to IT professionals who want to prepare for the 70-742 exam.

### At Course Completion

After completing this course, students will be able to:

- Plan and implement an IPv4 network.
- Implement Dynamic Host Configuration Protocol (DHCP).
- Implement IPv6.
- Implement Domain Name System (DNS).
- Implement and manage IP address management (IPAM).
- Plan for remote access.
- Implement DirectAccess.
- Implement virtual private networks (VPNs).
- Implement networking for branch offices.
- Configure advanced networking features.
- Implement software defined networking.

## Prerequisites

Before attending this course, students must have::

- Some exposure to and experience with AD DS concepts and technologies in Windows Server 2012 or Windows Server 2016.
- Experience working with and configuring Windows Server 2012 or Windows Server 2016
- Experience and an understanding of core networking technologies such as IP addressing, name resolution, and Dynamic Host Configuration Protocol (DHCP).
- Experience working with and an understanding of Microsoft Hyper-V and basic server virtualization concepts.
- An awareness of basic security best practices.
- Hands-on working experience with Windows client operating systems such as Windows 7, Windows 8, Windows 8.1, or Windows 10.
- Basic experience with the Windows PowerShell command-line interface.

## COURSE OUTLINE

### Module 1: Installing and configuring DCs

- Overview of AD DS
- Overview of AD DS DCs
- Deploying DCs

### Module 2: Managing objects in AD DS

- Managing user accounts
- Managing groups in AD DS
- Managing computer accounts
- Using Windows PowerShell for AD DS administration
- Implementing and managing organizational units

### Module 3: Advanced AD DS infrastructure management

- Overview of advanced AD DS deployments
- Deploying a distributed AD DS environment
- Configuring AD DS trusts

### Module 4: Implementing and administering AD DS sites and replication

- Overview of AD DS replication
- Configuring AD DS sites
- Configuring and monitoring AD DS replication

### Module 5: Implementing Group Policy

- Introducing Group Policy
- Implementing and administering GPOs
- Group Policy scope and Group Policy processing
- Troubleshooting the application of GPOs

**Module 6: Managing user settings with GPOs**

- Implementing administrative templates
- Configuring Folder Redirection and scripts
- Configuring Group Policy preferences

**Module 7: Securing AD DS**

- Securing domain controllers
- Implementing account security
- Audit authentication
- Configuring managed service accounts (MSAs)

**Module 8: Deploying and managing AD CS**

- Deploying CAs
- Administering CAs
- Troubleshooting and maintaining CAs

**Module 9: Deploying and managing certificates**

- Deploying and managing certificate templates
- Managing certificate deployment, revocation, and recovery
- Using certificates in a business environment
- Implementing and managing smart cards

**Module 10: Implementing and administering AD FS**

- Overview of AD FS
- AD FS requirements and planning
- Deploying and configuring AD FS
- Overview of Web Application Proxy

**Module 11: Implementing and administering AD RMS**

- Overview of AD RMS
- Deploying and managing an AD RMS infrastructure
- Configuring AD RMS content protection

**Module 12: Implementing AD DS synchronization with Azure AD**

- Planning and preparing for directory synchronization
- Implementing directory synchronization by using Azure AD Connect
- Managing identities with directory synchronization

**Module 13: Monitoring, managing, and recovering AD DS**

- Monitoring AD DS
- Managing the AD DS database
- Recovering AD DS objects