



# Windows Server 2019 Administration

## Overview

This instructor-led course is designed primarily for IT professionals who have some experience with Windows Server. It is designed for professionals who will be responsible for managing identity, networking, storage and compute by using Windows Server 2019, and who need to understand the scenarios, requirements, and options that are available and applicable to Windows Server 2019. The course teaches IT professionals the fundamental administration skills required to deploy and support Windows Server 2019 in most organizations.

## Course Details

### **WS-011T00-A Windows Server 2019 Administration**

This course covers core administration components and technologies in Windows Server 2019. This course also helps server administrators from previous Windows Server versions to update their knowledge and skills related to Windows Server 2019. Additionally, this course can help individuals looking for preparation materials to pass exams related to Windows Server. The course is also to individuals from a service desk role who wish to transition into server maintenance

### **About this course: Course outline**

- **Module 1: Windows Server administration**
  - Overview of Windows Server administration principles and tools
  - Introducing Windows Server 2019
  - Overview of Windows Server Core
- **Module 2: Identity services in Windows Server**
  - Overview of AD DS
  - Deploying Windows Server domain controllers

- Overview of Azure AD
- Implementing Group Policy
- Overview of AD CS
- **Module 3: Network infrastructure services in Windows Server**
  - Deploying and managing DHCP
  - Deploying and managing DNS services
  - Deploying and managing IPAM
- **Module 4: File servers and storage management in Windows Server**
  - Volumes and file systems in Windows Server
  - Implementing sharing in Windows Server
  - Implementing Storage Spaces in Windows Server
  - Implementing Data Deduplication
  - Implementing iSCSI
  - Deploying DFS
- **Module 5: Hyper-V virtualization and containers in Windows Server**
  - Lesson 1: Hyper-V in Windows Server
  - Lesson 2: Configuring VMs
  - Lesson 3: Securing virtualization in Windows Server
  - Lesson 4: Containers in Windows Server
  - Lesson 5: Overview of Kubernetes
- **Module 6: High availability in Windows Server**
  - Lesson 1: Planning for failover clustering implementation
  - Lesson 2: Creating and configuring failover clusters
  - Lesson 3: Overview of stretch clusters
  - Lesson 4: High availability and disaster recovery solutions with Hyper-V VMs



- **Module 7: Disaster recovery in Windows Server**
  - Lesson 1: Hyper-V Replica
  - Lesson 2: Backup and restore infrastructure in Windows Server
- **Module 8: Windows Server security**
  - Credentials and privileged access protection in Windows Server
  - Hardening Windows Server
  - JEA in Windows Server
  - Securing and analyzing SMB traffic
  - Windows Server update management
- **Module 9: RDS in Windows Server**
  - Overview of RDS
  - Configuring a session-based desktop deployment
  - Overview of personal and pooled virtual desktops
- **Module 10: Remote access and web services in Windows Server**
  - Lesson 1: Overview of RAS in Windows Server
  - Lesson 2: Implementing VPNs
  - Lesson 3: Implementing NPS
  - Lesson 4: Implementing Always on VPN
  - Lesson 5: Implementing Web Server in Windows Server
- **Module 11: Server and performance monitoring in Windows Server**
  - Overview of Windows Server monitoring tools
    - Using Performance Monitor
    - Monitoring event logs for troubleshooting
- **Module 12: Upgrade and migration in Windows Server**



- AD DS migration
- Storage Migration Service
- Windows Server Migration Tools

## Skills gained

- Use administrative techniques and tools in Windows Server 2019.
- Implement identity Services.
- Manage network infrastructure services.
- Configure file servers and storage.
- Manage virtual machines using Hyper-V virtualization and containers
- Implement high availability and disaster recovery solutions.
- Apply security features to protect critical resources.
- Configure Remote Desktop Services.
- Configure a virtual machine-based desktop infrastructure deployment.
- Implement remote access and web services.
- Implement service monitoring and performance monitoring, and apply troubleshooting.
- Perform upgrades and migration related to AD DS, and storage.