

# WINDOWS SERVER 2025 ADMINISTRATOR (WS011WV-2025)

Course Code: 834113

This course examines the services and features of Microsoft Windows Server versions from 2019 to 2025, including lessons and lab exercises about key attributes you might need on the job. It's a comprehensive guide to key areas of administrating contemporary Windows Server editions, and it's designed for IT professionals seeking one course in which they can learn all Windows Server knowledge and skills with respect to configuring, using, and maintaining it.

The course begins with an overview of administration techniques and continues with topics about identity services, networking, virtualization, high availability, and disaster recovery. This is a comprehensive course that has extensive content and labs, and you'll find it helpful for exam preparation and as a guide for administering a Windows Server environment.

## What You'll Learn

- Describe Windows Server 2025, its versions, requirements, and deployment techniques.
- Describe the concepts and main tools for administering Windows Server.
- Deploy domain controllers (DCs) and use the Group Policy mechanism to manage the AD DS environment.
- Describe the core networking services in Windows Server, including DHCP, DNS, and IP Address Management (IPAM).
- Explain data deduplication, sharing, iSCSI, and Distributed File System (DFS) services.
- Describe Hyper-V, options to help secure a virtualization environment, containers, and Kubernetes.
- Explain the high availability in Windows Server and the Failover Clustering feature.
- Describe the technologies to implement disaster recovery in a Windows Server environment.
- Explain the security technologies that address various critical components in a Windows Server environment.
- Describe RDS in Windows Server and Virtual Desktop Infrastructure (VDI) implementations.

- Describe remote-access technologies for Windows Server and Internet Information Services (IIS) deployment and usage.
- List the monitoring tools and technologies available in Windows Server.
- List the available tools in Windows Server for upgrading and migrating servers, and describe AD DS migration and the upgrade process.

## Prerequisites

- Some exposure to, and experience with, Active Directory Domain Services (AD DS) concepts and technologies in Windows Server 2019 and newer.
- Experience working with, and configuring, Windows Server 2019 and newer.
- Experience with, 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.
- Experience working directly with Windows client operating systems such as Windows 10 and newer.
- Basic experience with Windows PowerShell.
- Basic experience with Microsoft Azure platform.

# WINDOWS SERVER 2025 ADMINISTRATOR (WS011WV-2025)

Course Code: 834113

CLASSROOM LIVE

\$2,995 CAD

5 Day

## Classroom Live Outline

### **Module 1: Module 1 Overview of Windows Server 2025**

- Overview of Windows Server
- Windows Server deployment
- Overview of Windows Server Core

### **Lab: Deploy and configure Windows Server Core**

- Exercise 1: Deploying and configuring Server Core
- Exercise 2: Provisioning an Azure trial subscription

### **Module 2: Windows Server administration**

- Overview of Windows Server administration principles and tools
- Administer Windows Server with Azure Arc

### **Labs: Manage and configure Windows Server**

- Exercise 1: Perform remote server administration by using Server Manager
- Exercise 2: Implement Windows Admin Center for remote server administration
- Exercise 3: Use Remote PowerShell for remote server administration
- Exercise 4: Configure Azure Arc to manage Windows Server

### **Module 3: Windows Server identity and management services**

- Overview of AD DS
- Deploy Windows Server DCs
- Overview of Entra ID
- Implement Group Policy

### **Lab: Implement identity services and Group Policy**

- Exercise 1: Deploy a new domain controller on Server Core
- Exercise 2: Configure Group Policy

- Exercise 3: Configure directory synchronization by using Microsoft Entra Connect

#### **Module 4: Network infrastructure services in Windows Server**

- Deploy and manage DHCP
- Deploy and manage DNS services
- Deploy and manage IPAM

#### **Lab: Implement and configure network infrastructure services in Windows Server**

- Exercise 1: Deploy and configure DHCP
- Exercise 2: Deploy and configure DNS
- Exercise 3: Implement IPAM
- Exercise 4: Manage IP address spaces by using IPAM

#### **Module 5: File servers and storage management in Windows Server**

- Volumes and file systems in Windows Server
- Implement sharing in Windows Server
- Implement Storage Spaces in Windows Server
- Implement Data Deduplication
- Implement iSCSI
- Implement DFS

#### **Module 6: Hyper-V virtualization and containers in Windows Server**

- Hyper-V in Windows Server
- Configure VMs
- Secure virtualization in Windows Server
- Containers in Windows Server

#### **Module 7: High availability in Windows Server**

- Plan for implementation of failover clustering
- Create and configure failover clusters
- Overview of stretched clusters
- High availability and disaster-recovery solutions with Hyper-V VMs

#### **Lab: Implement failover clustering**

- Exercise 1: Configure iSCSI storage
- Exercise 2: Configure a failover cluster
- Exercise 3: Deploy and configure a highly available file server
- Exercise 4: Validate deployment of the highly available file server

#### **Module 8: Disaster recovery in Windows Server**

- Hyper-V Replica
- Backup and restore an infrastructure in Windows Server

#### **Lab A: Implement Hyper-V Replica and Windows Server Backup**

- Exercise 1: Configure and implement Hyper-V Replica
- Exercise 2: Configure and implement backup with Windows Server Backup

#### **Module 9: Windows Server security**

- Credentials and privileged-access protection in Windows Server

- Harden Windows Server
- JEA in Windows Server
- Secure and analyze SMB traffic
- Windows Server update management

#### **Lab: Configure security in Windows Server**

- Exercise 1: Configure Windows Defender Credential Guard
- Exercise 2: Locate problematic accounts
- Exercise 3: Implement LAPS

#### **Module 10: RDS in Windows Server**

- Overview of RDS
- Configure a session-based desktop deployment
- Overview of pooled and personal virtual desktops

#### **Lab: Implement RDS in Windows Server**

- Exercise 1: Implement RDS
- Exercise 2: Configure RemoteApp collection settings

#### **Module 11: Remote access and web services in Windows Server**

- Deploy AD CS to secure network traffic
- Overview of remote access in Windows Server
- Implement VPNs
- Implement NPS
- Implement Always On VPN
- Implement Web Server in Windows Server

#### **Lab: Deploy network workloads**

- Exercise 1: Deploying AD CS
- Exercise 2: Implement Web Application Proxy
- Exercise 3: Implement VPN in Windows Server
- Exercise 4: Deploy and configure Web Server

#### **Module 12: Server and performance monitoring in Windows Server**

- Overview of Windows Server monitoring tools
- Use Performance Monitor
- Monitor event logs for troubleshooting

#### **Lab: Monitor and troubleshoot Windows Server**

- Exercise 1: Establish a performance baseline
- Exercise 2: Identify the source of a performance problem
- Exercise 3: Review and configure centralized event logs

#### **Module 13: Upgrade and migration in Windows Server (optional)**

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

#### **Lab: Migrate server workloads**

- Exercise 1: Select a process to migrate server workloads

- Exercise 2: Plan how to migrate files by using Storage Migration Service

# WINDOWS SERVER 2025 ADMINISTRATOR (WS011WV-2025)

Course Code: 834113

VIRTUAL CLASSROOM LIVE

\$2,995 CAD

5 Day

## Virtual Classroom Live Outline

### **Module 1: Module 1 Overview of Windows Server 2025**

- Overview of Windows Server
- Windows Server deployment
- Overview of Windows Server Core

### **Lab: Deploy and configure Windows Server Core**

- Exercise 1: Deploying and configuring Server Core
- Exercise 2: Provisioning an Azure trial subscription

### **Module 2: Windows Server administration**

- Overview of Windows Server administration principles and tools
- Administer Windows Server with Azure Arc

### **Labs: Manage and configure Windows Server**

- Exercise 1: Perform remote server administration by using Server Manager
- Exercise 2: Implement Windows Admin Center for remote server administration
- Exercise 3: Use Remote PowerShell for remote server administration
- Exercise 4: Configure Azure Arc to manage Windows Server

### **Module 3: Windows Server identity and management services**

- Overview of AD DS
- Deploy Windows Server DCs
- Overview of Entra ID
- Implement Group Policy

### **Lab: Implement identity services and Group Policy**

- Exercise 1: Deploy a new domain controller on Server Core
- Exercise 2: Configure Group Policy

- Exercise 3: Configure directory synchronization by using Microsoft Entra Connect

#### **Module 4: Network infrastructure services in Windows Server**

- Deploy and manage DHCP
- Deploy and manage DNS services
- Deploy and manage IPAM

#### **Lab: Implement and configure network infrastructure services in Windows Server**

- Exercise 1: Deploy and configure DHCP
- Exercise 2: Deploy and configure DNS
- Exercise 3: Implement IPAM
- Exercise 4: Manage IP address spaces by using IPAM

#### **Module 5: File servers and storage management in Windows Server**

- Volumes and file systems in Windows Server
- Implement sharing in Windows Server
- Implement Storage Spaces in Windows Server
- Implement Data Deduplication
- Implement iSCSI
- Implement DFS

#### **Module 6: Hyper-V virtualization and containers in Windows Server**

- Hyper-V in Windows Server
- Configure VMs
- Secure virtualization in Windows Server
- Containers in Windows Server

#### **Module 7: High availability in Windows Server**

- Plan for implementation of failover clustering
- Create and configure failover clusters
- Overview of stretched clusters
- High availability and disaster-recovery solutions with Hyper-V VMs

#### **Lab: Implement failover clustering**

- Exercise 1: Configure iSCSI storage
- Exercise 2: Configure a failover cluster
- Exercise 3: Deploy and configure a highly available file server
- Exercise 4: Validate deployment of the highly available file server

#### **Module 8: Disaster recovery in Windows Server**

- Hyper-V Replica
- Backup and restore an infrastructure in Windows Server

#### **Lab A: Implement Hyper-V Replica and Windows Server Backup**

- Exercise 1: Configure and implement Hyper-V Replica
- Exercise 2: Configure and implement backup with Windows Server Backup

#### **Module 9: Windows Server security**

- Credentials and privileged-access protection in Windows Server



- Harden Windows Server
- JEA in Windows Server
- Secure and analyze SMB traffic
- Windows Server update management

#### **Lab: Configure security in Windows Server**

- Exercise 1: Configure Windows Defender Credential Guard
- Exercise 2: Locate problematic accounts
- Exercise 3: Implement LAPS

#### **Module 10: RDS in Windows Server**

- Overview of RDS
- Configure a session-based desktop deployment
- Overview of pooled and personal virtual desktops

#### **Lab: Implement RDS in Windows Server**

- Exercise 1: Implement RDS
- Exercise 2: Configure RemoteApp collection settings

#### **Module 11: Remote access and web services in Windows Server**

- Deploy AD CS to secure network traffic
- Overview of remote access in Windows Server
- Implement VPNs
- Implement NPS
- Implement Always On VPN
- Implement Web Server in Windows Server

#### **Lab: Deploy network workloads**

- Exercise 1: Deploying AD CS
- Exercise 2: Implement Web Application Proxy
- Exercise 3: Implement VPN in Windows Server
- Exercise 4: Deploy and configure Web Server

#### **Module 12: Server and performance monitoring in Windows Server**

- Overview of Windows Server monitoring tools
- Use Performance Monitor
- Monitor event logs for troubleshooting

#### **Lab: Monitor and troubleshoot Windows Server**

- Exercise 1: Establish a performance baseline
- Exercise 2: Identify the source of a performance problem
- Exercise 3: Review and configure centralized event logs

#### **Module 13: Upgrade and migration in Windows Server (optional)**

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

#### **Lab: Migrate server workloads**

- Exercise 1: Select a process to migrate server workloads

- Exercise 2: Plan how to migrate files by using Storage Migration Service

Dec 15 - 19, 2025 | 9:00 AM - 5:00 PM EST

Jan 5 - 9, 2026 | 9:00 AM - 5:00 PM EST

Mar 16 - 20, 2026 | 9:00 AM - 5:00 PM EDT

May 18 - 22, 2026 | 9:00 AM - 5:00 PM EDT

Jul 6 - 10, 2026 | 9:00 AM - 5:00 PM EDT

Visit us at [www.globalknowledge.com](http://www.globalknowledge.com) or call us at 1-866-716-6688.

Date created: 12/6/2025 2:38:30 AM

Copyright © 2025 Global Knowledge Training LLC. All Rights Reserved.