

Course Code: 821500

Configure advanced Windows Server services using on-premises, hybrid, and cloud technologies.

This course teaches IT Professionals to configure advanced Windows Server services using on-premises, hybrid, and cloud technologies. The course teaches IT Professionals how to leverage the hybrid capabilities of Azure, how to migrate virtual and physical server workloads to Azure laaS, and how to secure Azure VMs running Windows Server. The course also teaches IT Professionals how to perform tasks related to high availability, troubleshooting, and disaster recovery. The course highlights administrative tools and technologies including Windows Admin Center, PowerShell, Azure Arc, Azure Policy, Azure Monitor, Azure Update Manager, Microsoft Defender for Identity, Microsoft Defender for Cloud, and laaS virtual machine administration.

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Microsoft Azure Certification Video

What You'll Learn

- Secure Windows Server on-premises and hybrid infrastructures
- Implement Windows Server high availability
- Implement disaster recovery in Windows Server on-premises and hybrid environments
- Migrate servers and workloads in on-premises and hybrid environments
- Monitor and troubleshoot Windows Server environments

Who Needs to Attend

This four-day course is intended for Windows Server Hybrid Administrators who have experience working with Windows Server and want to extend the capabilities of their on-premises environments by combining on-premises and hybrid technologies. Windows Server Hybrid Administrators who already implement and manage on-premises core technologies want to secure and protect their environments, migrate virtual and physical workloads to Azure laas, enable a highly available, fully redundant environment, and perform monitoring and troubleshooting.



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CLASSROOM LIVE

\$2,595 USD

4 Day

Classroom Live Outline

Module 1: Secure Windows Server on-premises and hybrid infrastructures

- Implement Windows Server laaS VM network security
- Audit the security of Windows Server laaS Virtual Machines
- Manage Azure updates
- Create and implement application allowlists with adaptive application control
- Configure BitLocker disk encryption for Windows laaS Virtual Machines
- Implement change tracking and file integrity monitoring for Windows laaS VMs
- Secure Windows Server DNS
- Secure Windows Server user accounts
- Hardening Windows Server
- Windows Server update management

Module 2: Implement Windows Server high availability

- Introduction to Cluster Shared Volumes
- Implement Windows Server failover clustering
- Implement high availability of Windows Server VMs
- Implement Windows Server File Server high availability
- Implement scale and high availability with Windows Server VM

Module 3: Implement disaster recovery in Windows Server on-premises and hybrid environments

- Implement Hyper-V Replica
- Implement hybrid backup and recovery with Windows Server laaS
- Protect your on-premises infrastructure from disasters with Azure Site Recovery
- Protect your Azure infrastructure with Azure Site Recovery
- Protect your virtual machines by using Azure Backup

Module 4: Migrate servers and workloads in on-premises and hybrid environments

- Migrate on-premises Windows Server instances to Azure laaS virtual machines
- Upgrade and migrate Windows Server laaS virtual machines
- Active Directory Domain Services migration
- Migrate file server workloads using Storage Migration Service
- Migrate Windows Server roles

Module 5: Monitor and troubleshoot Windows Server environments

- Monitor Windows Server laaS Virtual Machines and hybrid instances
- Monitor your Azure virtual machines with Azure Monitor
- Monitor Windows Server performance
- Manage and monitor Windows Server event logs
- Implement Windows Server auditing and diagnostics
- Troubleshoot on-premises and hybrid networking
- Troubleshoot Windows Server Virtual Machines in Azure
- Troubleshoot Active Directory

Classroom Live Labs

Lab: Configuring security in Windows Server

- Configuring Windows Defender Credential Guard
- Locating problematic accounts
- Implementing LAPS

Lab: Using Azure Security Center in hybrid scenarios

- Provisioning Azure VMs running Windows Server
- Configuring Azure Security Center
- Onboarding on-premises Windows Server into Azure Security Center
- Verifying the hybrid capabilities of Azure Security Center
- Configuring Windows Server 2019 security in Azure VMs

Lab: Implementing failover clustering

- Configuring iSCSI storage
- Configuring a failover cluster
- Deploying and configuring a highly available file server
- Validating the deployment of the highly available file server

Lab: Implementing Hyper-V Replica and Windows Server Backup

- Implementing Hyper-V Replica
- Implementing backup and restore with Windows Server Backup

Lab: Implementing Azure-based recovery services

- Implementing the lab environment
- Creating and configuring an Azure Site Recovery vault
- Implementing Hyper-V VM protection by using Azure Site Recovery vault
- Implementing Azure Backup

Lab: Migrating Windows Server workloads to laaS VMs

- Deploying AD DS domain controllers in Azure
- Migrating file server shares by using Storage Migration Service

Lab: Migrating on-premises VMs servers to laaS VMs

- Implementing assessment and discovery of Hyper-V VMs using Azure Migrate
- Implementing migration of Hyper-V workloads using Azure Migrate

Lab: Monitoring and troubleshooting Windows Server

- Establishing a performance baseline
- Identifying the source of a performance problem
- · Viewing and configuring centralized event logs

Lab: Monitoring and troubleshooting of laaS VMs running Windows Server

- Enabling Azure Monitor for virtual machines
- Setting up a VM with boot diagnostics
- Setting up a Log Analytics workspace and Azure Monitor VM Insights



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VIRTUAL CLASSROOM LIVE

\$2,595 USD

4 Day

Virtual Classroom Live Outline

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- Manage Azure updates
- Create and implement application allowlists with adaptive application control
- Configure BitLocker disk encryption for Windows laaS Virtual Machines
- Implement change tracking and file integrity monitoring for Windows laaS VMs
- Secure Windows Server DNS
- Secure Windows Server user accounts
- Hardening Windows Server
- Windows Server update management

Module 2: Implement Windows Server high availability

- Introduction to Cluster Shared Volumes
- Implement Windows Server failover clustering
- Implement high availability of Windows Server VMs
- Implement Windows Server File Server high availability
- Implement scale and high availability with Windows Server VM

Module 3: Implement disaster recovery in Windows Server on-premises and hybrid environments

- Implement Hyper-V Replica
- Implement hybrid backup and recovery with Windows Server laaS
- Protect your on-premises infrastructure from disasters with Azure Site Recovery
- Protect your Azure infrastructure with Azure Site Recovery
- Protect your virtual machines by using Azure Backup

Module 4: Migrate servers and workloads in on-premises and hybrid environments

- Migrate on-premises Windows Server instances to Azure laaS virtual machines
- Upgrade and migrate Windows Server laaS virtual machines
- Active Directory Domain Services migration
- Migrate file server workloads using Storage Migration Service
- Migrate Windows Server roles

Module 5: Monitor and troubleshoot Windows Server environments

- Monitor Windows Server laaS Virtual Machines and hybrid instances
- Monitor your Azure virtual machines with Azure Monitor
- Monitor Windows Server performance
- Manage and monitor Windows Server event logs
- Implement Windows Server auditing and diagnostics
- Troubleshoot on-premises and hybrid networking
- Troubleshoot Windows Server Virtual Machines in Azure
- Troubleshoot Active Directory

Virtual Classroom Live Labs

Lab: Configuring security in Windows Server

- Configuring Windows Defender Credential Guard
- Locating problematic accounts
- Implementing LAPS

Lab: Using Azure Security Center in hybrid scenarios

- Provisioning Azure VMs running Windows Server
- Configuring Azure Security Center
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- Implementing Azure Backup

Lab: Migrating Windows Server workloads to laaS VMs

- Deploying AD DS domain controllers in Azure
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- Setting up a Log Analytics workspace and Azure Monitor VM Insights

Oct 6 - 9, 2025 | 9:00 AM - 5:00 PM EDT

Dec 1 - 4, 2025 | 9:00 AM - 5:00 PM EST

Feb 9 - 12, 2026 | 9:00 AM - 5:00 PM EST

Feb 17 - 20, 2026 | 12:00 - 8:00 PM EST

Apr 27 - 30, 2026 | 9:00 AM - 5:00 PM EDT



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PRIVATE GROUP TRAINING

4 Day

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Date created: 8/30/2025 5:41:05 AM

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