



ExecuTrain

Impulsamos tu talento tecnológico



MICROSOFT

RED HAT

VIRTUALIZACIÓN

CIBERSEGURIDAD

DESARROLLO

OFFICE

BIG DATA

BLOCK CHAIN

BASES DE DATOS

GESTIÓN DE
SERVICIOS IT

CLOUD
COMPUTING

METODOLOGÍAS
EN PROYECTOS

SISTEMAS
OPERATIVOS

Y MÁS...



www.executrain.com.mx



¿Por qué ExecuTrain?

ExecuTrain es un proveedor de entrenamiento corporativo a nivel internacional y líder mundial en la capacitación empresarial. Contamos con más de 30 años de Experiencia y con más de 75 mil personas capacitadas a nivel Nacional.

Te guiamos en la definición de tus requerimientos de capacitación, en las diferentes etapas:

- ✓ Detección de necesidades, evaluación de conocimientos, plan de capacitación y seguimiento posterior para elegir el plan de capacitación como tú lo necesitas.
- ✓ El **más amplio catálogo de cursos**, desde un nivel básico hasta los niveles de conocimientos más especializados.
- ✓ En ExecuTrain el material y la **metodología están diseñados por expertos en aprendizaje humano**. Lo que te garantiza un mejor conocimiento en menor tiempo.
- ✓ Tú puedes confiar y estar seguro del aprendizaje porque nuestro **staff de instructores es de primer nivel**, algunos de los cuales son consultores en reconocidas empresas.
- ✓ No pierdas tu tiempo, los cursos están diseñados para un aprendizaje práctico.

Nuestro compromiso es que tú aprendas, si no quedas satisfecho con los resultados del programa, podrás volver a tomar los cursos hasta tu entera satisfacción o la devolución de tu dinero.

Modalidad de Servicio



Cursos en Fecha Calendario

Súmate a nuestros grupos en fechas públicas.



Cursos Privados

On site, en nuestras instalaciones o en línea con instructor en vivo.



Autoestudio con soporte de instructor

Cursos en modalidad autoestudio, con acceso 24/7 a la plataforma de estudio, con soporte de instructor y foros de ayuda

WS011WV-2025 / Windows Server 2025 Administration

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 administering 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.

Audience Profile

This course is for IT professionals who have some experience working with Windows Server and want a course that details the administration of core Windows Server 2025 components and technologies. It also should help server administrators of previous Windows Server versions to update their knowledge and skills with respect to Windows Server 2025.

Required 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.

At Course Completion

- ✓ 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



Modules

Module 1 Overview of Windows Server 2025

This module provides an overview of Windows Server 2025 and describes its versions and deployment techniques.

- Lesson 1 Overview of Windows Server
 - Windows Server history and role in business environments
 - Overview of new Windows Server 2025 features
 - Deprecated and removed Windows Server features
 - Windows Server 2025 editions
 - Windows Server 2025 Datacenter: Azure Edition
 - Windows Server pay-as-you-go
 - Azure Hybrid Benefit for Windows Server
 - Windows Server release and servicing channels
 - By completing this lesson, you'll achieve the knowledge and skills to describe the Windows Server and its editions and servicing channels.
- Lesson 2 Windows Server deployment
 - Hardware requirements for Windows Server 2025
 - Overview of deployment options
 - Deployment accelerators
 - Licensing and activation models for Windows Server
- Lesson 3 Overview of Windows Server Core
 - Overview of Windows Server Core and its usage scenarios
 - Server Core installation and post-installation tasks

- Use the Sconfig tool in Server Core
- On-demand installation features in Server Core
- Demonstration: Configure Server Core
- By completing this lesson, you'll achieve the knowledge and skills to describe Windows Server Core, including specific details about it and ways to administer it.

Lab: Deploy and configure Windows Server Core

- Exercise 1: Deploying and configuring Server Core
- Exercise 2: Provisioning an Azure trial subscription
- By completing this lab, you'll achieve the knowledge and skills to deploy and configure Server Core.

Module 2 Windows Server administration

This module details administration tools for Windows Server. You'll learn how to select the appropriate administration tool and use it effectively and securely.

- Lesson 1 Overview of Windows Server administration principles and tools
 - What is Windows Admin Center?
 - Demonstration: Use Windows Admin Center
 - Deploy Windows Admin Center in Azure
 - Overview of Server Manager
 - Overview of remote server administration

- Demonstration: Manage servers remotely
- Use least-privilege administration
- Demonstration: Delegate privileges
- Privileged Access Workstations and jump servers, and when to use them
- By completing this lesson, you'll achieve the knowledge and skills to describe the concepts and main tools for administering Windows Server.
- Lesson 2 Administer Windows Server with Azure Arc
 - What is Azure Arc?
 - What are Azure Arc-enabled servers?
 - Connect Windows Server to Azure Arc
 - Manage Windows Server from Azure Arc
 - Manage updates by using Azure Update Manager
 - Demonstration: Connect Windows Server to Azure Arc
 - By completing this lesson, you'll achieve the knowledge and skills to describe Windows Server and techniques for its deployment, activation, and servicing.

Lab: 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
- By completing this lab, you'll achieve the knowledge and skills to:
- Perform remote server administration by using Server Manager.
- Implement Windows Admin Center for remote server administration.

- Use Remote PowerShell for remote server administration.
- Configure Azure Arc to manage Windows Server.

Module 3 Windows Server identity and management services

This module covers identity roles in Windows Server. It also discusses the main management mechanisms of Active Directory Domain Services (AD DS), in addition to Active Directory Certificate Services (AD CS) and the cloud-based identity service Microsoft Entra ID (Entra ID). In this module, you'll learn how to deploy domain controllers (DCs) and use the Group Policy mechanism to manage the AD DS environment.

- Lesson 1 Overview of AD DS
 - What is AD DS?
 - What's new in AD DS in Windows Server 2025?
 - AD DS objects
 - AD DS forests and domains
 - Overview of OUs in AD DS
 - What is the AD DS schema?
 - Overview of the AD DS replication process
 - How does the AD DS sign-in process work?
 - Overview of AD DS administration tools
 - Demonstration: Use tools to manage objects and properties in AD DS
 - By completing this lesson, you'll achieve the knowledge and skills to describe and manage AD DS and AD DS objects and processes.
- Lesson 2 Deploy Windows Server DCs
 - What is an AD DS DC?
 - What is the global catalog?
 - What are operations masters in AD DS?
 - Deploy AD DS DCs
 - Upgrade from a previous AD DS version
 - DC cloning

- Overview of DC service SRV records
- Demonstration: Explore DC SRV records in DNS
- Transfer and seize roles in AD DS
- Deploy a DC in Azure IaaS
- By completing this lesson, you'll achieve the knowledge and skills to describe and manage AD DS domain controllers and their roles and records.
- Lesson 3 Overview of Entra ID
 - AD DS scope and limitations
 - What is Entra ID?
 - Manage Entra ID
 - Entra ID versions and capabilities
 - Authentication with Entra ID
 - Benefits of integrating Entra ID with AD DS
 - Connect AD DS with Entra ID by using Entra Connect
 - Connect AD DS with Entra ID by using Entra Cloud Sync
 - Microsoft Entra Connect Health
 - Microsoft Entra ID Domain Services
 - Deploy a managed domain with Microsoft Entra Domain Services
 - By completing this lesson, you'll achieve the knowledge and skills to describe Entra ID, authentication with Entra ID and connect Entra ID with AD DS.
- Lesson 4 Implement Group Policy
 - What are Group Policy and GPOs?
 - Overview of GPO scope and inheritance
 - Default domain GPOs
 - Demonstration: Create and configure a domain-based GPO
 - Overview of GPO storage and replication
 - What are Starter GPOs?
 - What are administrative templates?
 - Overview of the central store
 - By completing this lesson, you'll achieve the knowledge and skills

to implement and manage Group Policy objects.

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
- By completing this lab, you'll achieve the knowledge and skills to:
- Deploy a new domain controller on Server Core.
- Configure Group Policy.
- Configure directory synchronization by using Microsoft Entra Connect.

Module 4 Network infrastructure services in Windows Server

This module details the core networking services in Windows Server, including DHCP, DNS, and IP Address Management (IPAM).

- Lesson 1 Deploy and manage DHCP
 - Overview of the DHCP server role
 - Install and configure the DHCP role
 - Configure DHCP options
 - Demonstration: Configure the DHCP server role
 - Configure DHCP scopes
 - Demonstration: Create and configure a DHCP scope
 - DHCP AD DS authorization
 - High-availability options for DHCP
 - How to achieve DHCP failover
 - By completing this lesson, you'll achieve the knowledge and skills to install, configure and manage DHCP server role.
- Lesson 2 Deploy and manage DNS services
 - DNS components
 - What are DNS zones?
 - What are DNS records?

- Demonstration: Install and configure the DNS role
- Manage DNS services
- Records management in DNS
- Configure DNS zones
- What is DNS forwarding?
- DNS for on-premises and Azure resources
- DNS integration in AD DS
- Overview of DNS policies
- Overview of DNSSEC
- By completing this lesson, you'll achieve the knowledge and skills to install, configure and manage DNS server, DNS zones and DNS policies.
- Lesson 3 Deploy and manage IPAM
 - What is IPAM and when should you use it?
 - IPAM deployment requirements
 - Process for deploying IPAM
 - Configure IPAM options
 - Demonstration: Install the IPAM role service (optional)
 - Administer the IPAM service
 - Manage DNS zones with IPAM
 - Configure DHCP servers with IPAM
 - By completing this lesson, you'll achieve the knowledge and skills to deploy and administer IPAM service.

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
- By completing this lab, you'll achieve the knowledge and skills to:
 - Deploy and configure DHCP.
 - Deploy and configure DNS.
 - Implement IPAM.
 - Manage IP address spaces by using IPAM.

Module 5 File servers and storage management in Windows Server

This module details services that deal with file systems, volumes, and storage. Students will also learn about data deduplication, sharing, iSCSI, and Distributed File System (DFS) services.

- Lesson 1 Volumes and file systems in Windows Server
 - Overview of file systems that Windows Server supports
 - Use ReFS in Windows Server
 - Overview of disk volumes
 - Demonstration: Manage volumes in Windows Server
 - Overview of File Server Resource Manager
 - Manage permissions on volumes
 - By completing this lesson, you'll achieve the knowledge and skills to describe file systems in Windows Server, describe and manage volumes.
- Lesson 2 Implement sharing in Windows Server
 - What is SMB?
 - Overview of SMB improvements
 - Overview of SMB over QUIC
 - Configure SMB shares
 - Demonstration: Configure SMB shares by using Server Manager and Windows PowerShell
 - Best practices for sharing resources
 - Overview of NFS
 - By completing this lesson, you'll achieve the knowledge and skills to implement sharing and manage shared resources in Windows Server.
- Lesson 3 Implement Storage Spaces in Windows Server
 - What is the Storage Spaces feature?
 - Components and features of Storage Spaces
 - Usage scenarios for Storage Spaces

- Provision of a storage space
- Demonstration: Configure Storage Spaces
- Overview of Storage Spaces Direct
- Demonstration: Configure Storage Spaces Direct
- By completing this lesson, you'll achieve the knowledge and skills to describe Storage Spaces, configure components of Storage spaces and configure storage spaces direct.
- Lesson 4 Implement Data Deduplication
 - What is Data Deduplication?
 - Usage scenarios for Data Deduplication
 - Core components of Data Deduplication
 - Deploy Data Deduplication
 - Demonstration: Implement Data Deduplication
 - Backup and restore considerations with Data Deduplication
 - By completing this lesson, you'll achieve the knowledge and skills to implement and manage Data Deduplication.
- Lesson 5 Implement iSCSI
 - What is iSCSI?
 - iSCSI components
 - Considerations for implementing iSCSI
 - iSCSI usage scenarios
 - Demonstration: Configure and connect to an iSCSI target
 - By completing this lesson, you'll achieve the knowledge and skills to describe, implement and manage iSCSI service in Windows Server.
- Lesson 6 Implement DFS
 - Overview of DFS
 - Deploy the DFS service
 - Implement DFSR for files and AD DS
 - DFS namespaces and replication
 - Manage DFS databases

- Overview of Azure Files and storage utilities for datacenters
- By completing this lesson, you'll achieve the knowledge and skills to describe DFS, manage DFS replication and describe Azure Files.

Lab A: Implement Data Deduplication

- Exercise 1: Install the Data Deduplication role service
- Exercise 2: Configure and verify data deduplication
- By completing this lab, you'll achieve the knowledge and skills to:
- Install the Data Deduplication role service.
- Configure and verify data deduplication.
- Lab B: Configure iSCSI storage
- Exercise 1: Install and configure the iSCSI Target Server role
- Exercise 2: Configure and connect to iSCSI Targets
- By completing this lab, you'll achieve the knowledge and skills to:
- Install and configure the iSCSI Target Server role.
- Configure and connect to iSCSI Targets.
- Lab C: Configure redundant storage spaces
- Exercise 1: Configure the redundant Storage Spaces feature
- By completing this lab, you'll achieve the knowledge and skills to:
- Configure the redundant Storage Spaces feature.
- Lab D: Implement Storage Spaces Direct
- Exercise 1: Implement Storage Spaces Direct
- By completing this lab, you'll achieve the knowledge and skills to:
- Implement Storage Spaces Direct.
- Lab E: Configure SMB over QUIC
- Exercise 1: Configure and issue a server certificate
- Exercise 2: Configure SMB over QUIC

- By completing this lab, you'll achieve the knowledge and skills to:
- Configure and issue a server certificate.
- Configure SMB over QUIC.
- By completing this lab, you'll achieve the knowledge and skills to:
- Implement Data Deduplication.
- Configure iSCSI storage.
- Configure redundant storage spaces.
- Implement Storage Spaces Direct.
- Configure SMB over QUIC.

Module 6 Hyper-V virtualization and containers in Windows Server

In this module, students learn about virtualization services in Windows Server. The module details Hyper-V, options to help secure a virtualization environment, containers, and Kubernetes.

- Lesson 1 Hyper-V in Windows Server
 - Overview of the Hyper-V virtualization platform
 - Hyper-V improvements in Windows Server 2025
 - Manage Hyper-V with Hyper-V Manager
 - Best practices and considerations for configuring Hyper-V hosts
 - Overview of nested virtualization
 - Integrate the Hyper-V platform with Azure IaaS
 - By completing this lesson, you'll achieve the knowledge and skills to describe Hyper-V, new features in Windows Server 2025 and manage features of Hyper-V
- Lesson 2 Configure VMs
 - VM configuration and generation versions
 - Operating systems in Hyper-V VMs
 - Overview of VM settings
 - Storage options in Hyper-V
 - VHD formats and types
 - Shared VHDX and VHD Set files
 - Overview of Hyper-V networking
 - Networking features for Hyper-V
 - Manage VM checkpoints

- Import and export VMs
- Demonstration: Create and manage a VM
- By completing this lesson, you'll achieve the knowledge and skills to configure and manage Hyper-V virtual machines and its main components.
- Lesson 3 Secure virtualization in Windows Server
 - What is a guarded fabric?
 - Attestation modes for guarded fabric
 - Overview of the Host Guardian Service
 - Types of protected VMs in a guarded fabric
 - General process for creating shielded VMs
 - Process for powering-on shielded VMs
 - By completing this lesson, you'll achieve the knowledge and skills to describe virtualization security features in Windows Server.
- Lesson 4 Containers in Windows Server
 - What are containers?
 - Containers vs. VMs
 - Overview of container isolation modes
 - Manage containers using Docker
 - Pull and push container base images
 - Run a Windows container
 - Manage containers using Windows Admin Center
 - Demonstration: Deploy containers by using Docker and Windows Admin Center
 - By completing this lesson, you'll achieve the knowledge and skills to describe containers in Windows Server, manage containers with Docker and Windows Admin Center.

Lab A: Implement and configure virtualization in Windows Server

- Exercise 1: Create and configure VMs
- By completing this lab, you'll achieve the knowledge and skills to use Hyper-V Manager and Windows Admin Center to create a virtual switch and VHD, and then create and manage a VM.
- Lab B: Install and configure containers
- Exercise 1: Install Docker and download an image
- Exercise 2: Deploy and configure a container
- By completing this lab, you'll achieve the knowledge and skills to install and configure containers.

Module 7 High availability in Windows Server

This module details high availability in Windows Server and primarily focuses on the Failover Clustering feature.

- Lesson 1 Plan for implementation of failover clustering
 - What is failover clustering?
 - Achieve high availability with failover clustering
 - Clustering terminology and key components
 - Cluster quorum in Windows Server
 - Considerations for planning failover clustering
 - By completing this lesson, you'll achieve the knowledge and skills to describe and plan failover clustering feature.
- Lesson 2 Create and configure failover clusters
 - The Validate a Configuration Wizard and policy requirements for cluster support
 - Create a failover cluster
 - Demonstration: Create a failover cluster
 - Configure storage for failover clustering
 - Configure networking for failover clustering
 - Configure quorum options

- Demonstration: Configure a quorum
- Configure roles for high availability
- Manage failover clusters
- Configure cluster object properties
- Configure failover and failback
- By completing this lesson, you'll achieve the knowledge and skills to create, configure and manage failover clusters in Windows Server.
- Lesson 3 Overview of stretched clusters
 - What is a stretched cluster?
 - Overview of Storage Replica
 - Prerequisites for implementing a stretched cluster
 - Synchronous and asynchronous replication
 - Select a quorum and witness mode for a stretched cluster
 - Configure a stretched cluster
 - By completing this lesson, you'll achieve the knowledge and skills to describe stretched cluster, storage replica and cluster replication.
- Lesson 4 High availability and disaster-recovery solutions with Hyper-V VMs
 - High-availability options for Hyper-V VMs
 - Overview of live migration
 - Requirements for live migration
 - Provide high availability with Storage Migration
 - By completing this lesson, you'll achieve the knowledge and skills to describe and plan High availability and disaster-recovery solutions for Hyper-V.

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
- By completing this lab, you'll achieve the knowledge and skills to:
 - Configure iSCSI storage.
 - Configure a failover cluster.
 - Deploy and configure a highly available file server.
- Validate deployment of a highly available file server.

Module 8 Disaster recovery in Windows Server

This module details technologies to implement disaster recovery in a Windows Server environment.

- Lesson 1 Hyper-V Replica
 - Overview of Hyper-V Replica
 - Plan for Hyper-V Replica
 - Configure and implement Hyper-V Replica
 - Demonstration: Implement Hyper-V Replica
 - Overview of Azure Site Recovery
 - By completing this lesson, you'll achieve the knowledge and skills to describe and configure Hyper-V replica in Windows Server.
- Lesson 2 Back up and restore an infrastructure in Windows Server
 - Overview of Windows Server Backup
 - Implement backup and restore
 - Back up and restore Hyper-V VMs
 - Overview of Azure Backup
 - Implement backup and restore with Azure Backup
 - By completing this lesson, you'll achieve the knowledge and skills to describe, implement and manage backup 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
- By completing this lab, you'll achieve the knowledge and skills to:
 - Configure and implement Hyper-V Replica.
 - Configure and implement backup with Windows Server Backup.
- Lab B: Configure Azure Backup
- Exercise 1: Configure Azure Backup for On-Premises Servers
- By completing this lab, you'll achieve the knowledge and skills to configure Azure Backup for On-Premises Servers.

Module 9 Windows Server security

In this module, students learn about security technologies that address various critical components in a Windows Server environment.

- Lesson 1 Credentials and privileged-access protection in Windows Server
 - Configure user rights in Windows Server
 - What is the Protected Users group?
 - Overview of authentication policies and authentication-policy silos
 - What is Windows Defender Credential Guard?
 - Windows Defender Credential Guard requirements
 - Configure Windows Defender Credential Guard
 - NTLM blocking overview
 - LDAP security
 - Locate problematic accounts in AD DS
 - Demonstration: Locate problematic accounts
 - By completing this lesson, you'll achieve the knowledge and skills to configure security features in Windows Server to protect accounts.
- Lesson 2 Harden Windows Server
 - What is a Local Administrator Password Solution (LAPS)?

- LAPS improvements in Windows Server 2025
- How LAPS works
- Configure and manage passwords by using LAPS
- Demonstration: Configure and deploy LAPS
- Limit administrative access to help secure hosts
- How to help secure DCs
- Overview of the Security Compliance Toolkit
- By completing this lesson, you'll achieve the knowledge and skills to describe, implement and manage LAPS.
- Lesson 3 JEA in Windows Server
 - What is JEA?
 - Role capability files
 - Session-configuration files
 - JEA endpoints
 - Connect to a JEA endpoint
 - Demonstration: Connect to a JEA endpoint
 - By completing this lesson, you'll achieve the knowledge and skills to describe and implement just-enough-administration in Windows Server.
- Lesson 4 Secure and analyze SMB traffic
 - What is SMB?
 - SMB improvements in Windows Server 2025
 - SMB signing
 - SMB encryption
 - Demonstration: Configure SMB encryption on shares
 - By completing this lesson, you'll achieve the knowledge and skills to describe SMB and configure SMB encryption and signing.
- Lesson 5 Windows Server update management
 - Overview of Windows Update
 - What is the Windows Server Update Service?
 - WSUS server deployment options
 - What are Windows Update client policies?

- Other update deployment options
- By completing this lesson, you'll achieve the knowledge and skills to describe 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
- By completing this lab, you'll achieve the knowledge and skills to:
- Configure Windows Defender Credential Guard.
- Locate problematic accounts.
- Implement LAPS.

Module 10 RDS in Windows Server

This module details RDS in Windows Server and Virtual Desktop Infrastructure (VDI) implementations.

- Lesson 1 Overview of RDS
 - RDS overview and benefits
 - Client-experience features with RDS
 - Remote Desktop feature and RDS
 - What's new in RDS for Windows Server 2025?
 - Plan an RDS deployment
 - Access RDS
 - Overview of RD Gateway
 - Overview of RDS licensing
 - Azure Virtual Desktop
 - Overview of Windows App
- Lesson 2 Configure a session-based desktop deployment
 - Overview of deploying session-based desktops
 - Demonstration: Install RDS
 - What is a collection?
 - Configure session collection settings
 - Demonstration: Create and configure a session collection

- o High-availability options for session-based desktops
 - o Overview of RemoteApp
- Lesson 3 Overview of pooled and personal virtual desktops
 - o Overview of VM-based desktop deployments
 - o Overview of pooled virtual desktops
 - o Overview of personal virtual desktops
 - o Compare remote desktop options
 - o High availability for pooled and personal virtual desktops
 - o Prepare a virtual-desktop template

Lab Implement RDS in Windows Server

- Exercise 1: Implement RDS
- Exercise 2: Configure RemoteApp collection settings
- By completing this lab, you'll achieve the knowledge and skills to:
- Implement RDS.
- Configure RemoteApp collection settings.

Module 11 Remote access and web services in Windows Server

In this module, students learn about remote-access technologies for Windows Server and Internet Information Services (IIS) deployment and usage.

- Lesson 1 Deploy AD CS to secure network traffic
 - o What is AD CS?
 - o Options for implementing CA hierarchies
 - o What are certificates and certificate templates?
 - o Certificate enrollment methods
 - o Configure trust for certificates
 - o Demonstration: Enroll for a certificate
 - o By completing this lesson, you'll achieve the knowledge and skills

to deploy and manage AD CS as well as to deploy, enroll and manage certificates.

- Lesson 2 Overview of remote access in Windows Server
 - o What remote access options does Windows Server provide?
 - o Factors to consider when deploying PKI for remote access
 - o What is WAP?
 - o Authentication options in WAP
 - o Publish apps with WAP
 - o Discussion: Remote access usage scenarios
 - o By completing this lesson, you'll achieve the knowledge and skills to use remote access in Windows Server.
- Lesson 3 Implement VPNs
 - o VPN scenarios
 - o Site-to-site VPN
 - o Tunneling options
 - o Authentication protocols
 - o What is VPN Reconnect?
 - o Configure a VPN server
 - o Demonstration: Configure VPN
 - o By completing this lesson, you'll achieve the knowledge and skills to implement VPNs.
- Lesson 4 Implement NPS
 - o Overview of NPS
 - o Plan an NPS deployment
 - o Configure NPS policies
 - o Implement RADIUS with NPS
 - o Demonstration: Manage NPS
 - o By completing this lesson, you'll achieve the knowledge and skills to implement NPS.
- Lesson 5 Implement Always On VPN
 - o What is Always On VPN?
 - o Deploy Always On VPN
- Lesson 6 Implement Web Server in Windows Server
 - o Latest features in IIS
 - o Overview of IIS architecture
 - o Overview of the Web Server (IIS) role
 - o Prepare to install the Web Server (IIS) role

- Install and configure the Web Server (IIS) role
- Demonstration: Create and configure a new site in IIS
- By completing this lesson, you'll achieve the knowledge and skills to describe and configure Web Server (IIS) 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
- By completing this lab, you'll achieve the knowledge and skills to:
 - Implement Web Application Proxy.
 - Implement VPN in Windows Server.
 - Deploy and configure Web Server.

Module 12 Server and performance monitoring in Windows Server

This module details the monitoring tools and technologies available in Windows Server.

- Lesson 1 Overview of Windows Server monitoring tools
 - Overview of Task Manager
 - Overview of Performance Monitor
 - Overview of Resource Monitor
 - Overview of Reliability Monitor
 - Overview of Event Viewer
 - Monitor a server with Server Manager
 - Monitor a server with Windows Admin Center
 - Use Sysinternals tools to monitor servers
 - Use Azure tools for Windows Server monitoring
- Lesson 2 Use Performance Monitor
 - What are performance bottlenecks?
 - What to monitor

- What are data collector sets?
- Demonstration: Review performance with Performance Monitor
- Monitor network-infrastructure services
- Considerations for monitoring VMs
- Performance monitoring with Windows Admin Center
- By completing this lesson, you'll achieve the knowledge and skills to describe performance monitoring and use it in Windows Server.

- Lesson 3 Monitor event logs for troubleshooting
 - Use Server Manager to review event logs
 - What is a custom view?
 - Demonstration: Create a custom view
 - What are event-log subscriptions?
 - Demonstration: Configure an event subscription
 - By completing this lesson, you'll achieve the knowledge and skills to describe event logging and monitor it for troubleshooting purposes.

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
- By completing this lab, you'll achieve the knowledge and skills to:
 - Establish a performance baseline
 - Identify the source of a performance problem
 - Review and configure centralized event logs

Module 13 Upgrade and migration in Windows Server (optional)

This module details the available tools in Windows Server for upgrading and migrating servers, and explains AD DS migration and the upgrade process.

- Lesson 1 AD DS upgrade and migration
 - Windows Server upgrade overview
 - AD DS upgrade overview
 - Upgrade a previous AD DS version to Windows Server 2025
 - Migrate to AD DS in Windows Server 2025 from a previous version
 - Overview of the Active Directory Migration Tool
- Lesson 2 Storage Migration Service
 - Storage Migration Service overview and usage scenarios
 - Storage migration requirements
 - Migrate a server with storage migration
 - Storage migration considerations
- Lesson 3 Windows Server Migration Tools
 - What are Windows Server Migration Tools?
 - Install Windows Server Migration Tools
 - Use 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
- By completing this lab, you'll achieve the knowledge and skills to:
- Select a process to migrate server workloads.
- Plan how to migrate files by using Storage Migration Service.