

# Windows Server Administration

## Description

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

## Course Content

### Module 01: Windows Server Administration Overview

- Introducing Windows Server
- Windows Server Core Overview
- Windows Server administration principles and tools overview

### Module 02: Identity Services in Windows Server

- AD DS Overview
- Deploying Windows Server domain controllers
- Azure AD overview
- Implementing Group Policy
- Active Directory Certificate Services overview

### Module 03: Network Infrastructure services in Windows Server

- Deploying and managing DHCP
- Deploying and managing DNS service
- Deploying and managing IPAM
- Remote Access Services in Windows Server

### Module 04: 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 Distributed File System

### Module 05: Hyper-V virtualization and containers in Windows Server

- Hyper-V in Windows Server
- Configuring VMs
- Securing virtualization in Windows Server
- Containers in Windows Server
- Overview of Kubernetes

### Module 06: High Availability in Windows Server

- Planning for failover clustering implementation
- Creating and configuring failover cluster
- Overview of stretch clusters
- High availability and disaster recovery solutions with Hyper-V VMs

### **Module 07: Disaster recovery in Windows Server**

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

### **Module 08: Windows Server security**

- Credentials and privileged access protection
- Hardening Windows Server
- JEA in Windows Server
- Securing and analyzing SMB traffic
- Windows Server update management

### **Module 09: 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**

- Implementing VPNs
- Implementing Always On VPN
- Implementing NPS
- 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

### **Lab / Exercises**

- Online labs

### **Documentation**

- Digital courseware included

### **Participant profiles**

- IT Professionals who have some experiencing working with Windows Server and are looking for covering

core administration components and technologies in Windows Server 2019

- Server administrators from previous Windows Server versions to update their knowledge and skills related to Windows Server
- Individuals from a service desk role who wish to transition into server maintenance

### **Prerequisites**

- Some exposure to and experience with Active Directory Domain Services (AD DS) concepts and technologies in Windows Server
- 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
- Experience working hands-on with Windows client operating systems such as Windows 10 or Windows 11
- Basic experience with Windows PowerShell

### **Objectives**

- Use administrative techniques and tools in Windows Server
- Implement identity Services
- Manage network infrastructure services
- Configure file servers and storage
- Manage virtual machines using Hyper-V virtualisation 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

### **Niveau**

Intermédiaire

### **Classroom Registration Price (CHF)**

3900

### **Virtual Classroom Registration Price (CHF)**

3650

### **Duration (in Days)**

5

### **Reference**

55371AC