AZ-802: Administering Windows Server 2025

Total Duration: 40 Hours
Format: Theory, Live Demonstrations, and Hands-on Labs
Target Audience: IT Professionals and Systems Administrators preparing for the consolidated AZ-802 exam (replacing legacy AZ-800 & AZ-801).

Module 1 : Deploy and manage Active Directory Domain Services (AD DS)

- Deploying and managing Active Directory Domain Services (AD DS) forests and domains.
- Managing Domain Controllers, operations masters (FSMO roles), and Global Catalog placement.
- Configuring multi-site deployments, domain replication, and trust relationships.
- Managing Group Policy Objects (GPOs), scopes, inheritance, and central store management.
- **Hands-on Lab:** Configuring a multi-site AD topology, transferring FSMO roles, and enforcing fine-grained password policies.

Module 2 : Manage Windows Server instances and workloads in a hybrid environment

- Using Windows Admin Center, PowerShell remoting, and JEA (Just Enough Administration).
- Onboarding and managing servers via Azure Arc (Machine configuration, extensions, and policies).
- Managing updates with Azure Update Manager and automating configuration tracking.
- Executing remote management tasks across on-premises and cloud instances.
- **Hands-on Lab:** Deploying Azure Arc extensions to on-premises servers and enforcing configuration baselines via Azure Policy.

Module 3 : Manage virtual machines and containers

- Configuring and managing Hyper-V hosts, virtual switches, storage, and checkpoints.
- Implementing advanced features including nested virtualization, GPU partitioning, and Live Migration.
- Configuring Hyper-V Replica and Azure Backup/Recovery for workloads.
- Creating, deploying, and managing Windows Server containers and container networking.
- **Hands-on Lab:** Configuring Hyper-V Live Migration, setting up a Hyper-V Replica, and running a containerized application.

Module 4 : Implement and manage an on-premises and hybrid networking infrastructure

- Implementing advanced DNS solutions (Conditional forwarders, DNSSEC, split-horizon DNS).
- Deploying and managing DHCP scopes, high availability, and DHCP Failover.
- Implementing IP Address Management (IPAM) for address space monitoring.
- Connecting hybrid networks using Azure VPN gateways, ExpressRoute, and routing configurations.
- **Hands-on Lab:** Setting up DHCP failover, conditional forwarders for hybrid DNS resolution, and configuring IPAM.

Module 5 : Manage storage and file services

- Configuring and managing Storage Spaces, Storage Spaces Direct (S2D), and Storage Replica.
- Implementing File Server Resource Manager (FSRM), quotas, and file screening.
- Configuring SMB and NFS file shares, access-based enumeration, encryption, and SMB over QUIC.
- Implementing DFS Namespaces and DFS Replication (DFSR) alongside Azure File Sync.
- **Hands-on Lab:** Configuring Storage Spaces Direct, setting up FSRM quotas, and establishing an SMB over QUIC share.

Module 6 : Secure Windows Server infrastructure

- Implementing Windows Local Administrator Password Solution (Windows LAPS) and Credential Guard.
- Hardening domain controllers, managing the Protected Users group, and delegating permissions safely.
- Integrating Microsoft Defender for Cloud, vulnerability assessments, and security baselines.
- Managing BitLocker encryption and secure boot configurations.
- **Hands-on Lab:** Deploying Windows LAPS, configuring security compliance baselines, and onboarding servers to Defender for Cloud.

Module 7 : Monitor and troubleshoot Windows Server environments

- Monitoring performance using Performance Monitor, Event Viewer, and Data Collector Sets.
- Configuring Azure Monitor, Log Analytics workspaces, data collection rules, and alerts.
- Troubleshooting Active Directory replication errors, SYSVOL corruption, and DNS/DHCP failures.

- Performing authoritative/non-authoritative AD restorations and using DSRM (Directory Services Restore Mode).
- **Hands-on Lab:** Setting up Azure Monitor data collection rules, troubleshooting simulated AD replication failures, and performing an object recovery from the AD Recycle Bin.