



System Administrator ⌚ 5 hours of content | 30 hours of practice | **Final Project**

1. Introduction to System

- Fundamentals of Active Directory
- DMZ, VPN, and Remote Access Fundamentals
- Virtualization Fundamentals
- Cloud Computing Fundamentals

2. Active Directory

- Setting Up a Lab
- PowerShell Fundamentals
- Domain Trees and Forests
- Partitions in Active Directory Database
- Setting Up a Domain Controller
- Joining a Server to a Domain
- Read-Only Domain Controller (RODC)
- Configuring an RODC
- Promoting a Server to a Domain Controller
- PowerShell Remoting
- PowerShell Scripting
- FSMO Roles
- Managing FSMO Roles

3. Objects in Active Directory

- Organizational Units
- Creating OUs and Users
- Groups
- Creating Groups and Special Groups
- Universal Group Membership Caching (UGMC)
- Creating Active Directory Objects in PowerShell
- Services
- Processes
- Service Accounts
- Group Managed Service Accounts (GMSA)

4. DNS

- Understanding DNS
- Configuring DNS Manually
- Creating DNS Zones, Databases and Records
- DNS Forwarding

5. DHCP

- Configuring a DHCP Server
- Creating Scopes and Super Scopes
- DHCP Failover
- Multi-Domain and Sites
- Active Directory Trusts
- Configuring Trusts Between Domains
- Sites
- Intra-Site Replication
- Inter-Site Replication
- Creating Sites and Site Links
- Checking Replication
- Global Catalog

6. Group Policy Objects (GPOs)

- Understanding GPOs
- Creating GPO Policies
- GPO Preferences

7. Files Shares

- Managing File Shares
- BranchCache
- Understanding Distributed File System (DFS)
- Setting Up a DFS Server
- File Server Resource Manager (FSRM) File Screens
- FSRM Quotas

8. Storage

- Disks and Volumes
- Storage Spaces
- Storage Replication Between Servers
- Data Deduplication
- File Systems
- Working with File Systems
- NTFS Permissions
- Applying Permissions

9. Remote Access

- Remote Access Service (RAS)
- Server and Protocols
- Managing Remote Access and VPN
- Network Policy Server (NPS)
- Web Application Proxy (WAP)
- Managing NPS