

M55343A : Networking with Windows Server

Course Outline

Networking in Windows Server: Comprehensive Course

Module 1: Planning and Implementing an IPv4 Network

- **Topics:**
 - IPv4 addressing planning.
 - Configuring and troubleshooting IPv4 hosts and networks.
- **Labs:**
 - Planning an IPv4 network.
 - Implementing and troubleshooting IPv4 connectivity.
- **Outcomes:** Students will be able to plan addressing, configure hosts, and manage IPv4 networks.

Module 2: Implementing DHCP

- **Topics:**
 - Overview, deployment, and troubleshooting of DHCP.
- **Labs:**
 - Planning and implementing DHCP configurations.
- **Outcomes:** Students will understand DHCP roles and manage its deployment.

Module 3: Implementing IPv6

- **Topics:**
 - IPv6 addressing and coexistence with IPv4.
 - Transitioning from IPv4 to IPv6.
- **Labs:**
 - Configuring IPv6 transition technologies.
- **Outcomes:** Students will be able to implement IPv6 and manage network coexistence.

Module 4: Implementing DNS

- **Topics:**
 - DNS server configuration, zone management, and integration with AD DS.
- **Labs:**
 - Planning name resolution and configuring advanced DNS settings.
- **Outcomes:** Students will configure, integrate, and troubleshoot DNS.

Module 5: Implementing and Managing IPAM

- **Topics:**
 - IPAM overview, deployment, and managing IP spaces.
- **Labs:**
 - Installing and provisioning IPAM servers.
- **Outcomes:** Students will deploy IPAM and manage IP addressing.

Module 6: Remote Access in Windows Server

- **Topics:**
 - Overview of remote access and Web Application Proxy.
- **Labs:**
 - Implementing and validating Web Application Proxy.
- **Outcomes:** Students will implement remote access solutions.

Module 7: Implementing DirectAccess

- **Topics:**
 - Introduction and advanced infrastructure of DirectAccess.
- **Labs:**
 - Configuring DirectAccess via the Getting Started Wizard.
- **Outcomes:** Students will deploy and manage DirectAccess.

Module 8: Implementing VPNs

- **Topics:**
 - Planning and deploying VPNs.
- **Labs:**
 - Implementing and troubleshooting VPNs.
- **Outcomes:** Students will design and implement VPN solutions.

Module 9 & 10: Networking for Branch Offices

- **Topics:**
 - Distributed File System (DFS) and BranchCache.
- **Labs:**
 - Implementing DFS and BranchCache.
- **Outcomes:** Students will deploy network services tailored for branch offices.

Module 11 & 12: Configuring Advanced Networking Features

- **Topics:**
 - High-performance networking and Hyper-V enhancements.
- **Labs:**
 - Configuring Hyper-V virtual switches and advanced features.
- **Outcomes:** Students will implement advanced networking in Hyper-V.

Module 13: Implementing Software Defined Networking (SDN)

- **Topics:**
 - Network virtualization and Network Controller deployment.
- **Labs:**
 - Deploying and configuring Network Controller.
- **Outcomes:** Students will implement SDN in Windows Server.