

M55343A : Networking with Windows Server

Course Outline

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