

Microsoft Certified Systems Engineer (MCSE)

(Microsoft Certification Mapped Curriculum)

Network Essentials

- Networking Concepts, History of Server OS
- Introduction to windows server 2012 R2 / 2016 / 2019 / 2022
- Features of Windows Server 2019/2022
- Installation of Windows Server 2019
- Installation of Windows Server 2022
- Installation of Windows 10
- Introduction and Creation of Users accounts

Active Directory - Domain Services

- IP Addressing Course Curriculum

Physical Structure of AD-DS

- Logical Topologies - Peer-Peer & Domain Models
- Introduction to Directory Services
- Evolution of Active Directory Services - LDAP Protocol
- Features of Active Directory
- Installing Active Directory – Domain Controller

Member Servers, Clients, User Configuration

- Configuring Member Servers and Clients
- Creating Users in AD-DS
- User Logon policies
- Password policies
- Account Lockout policies
- User properties

Permissions / Access Control Lists

- File Systems
- Security and Sharing Permissions - Folders & Files
- Configuring Map Network Drive
- Access Based Enumeration

Profiles and File Server Resource Manager [FSRM]

- Types of Profiles – Local & Roaming
- Home Folder
- Configuring Quotas using FSRM
- Implementing File Screening using FSRM
- Configuring Storage Reports Management
- Introduction to Distributed File System
- Creating Organizational Unit
- Delegating Control to a User

Logical Structure of AD - DS

- Configuring ADC
- Tree Structure - Child Domain
- Forest Structure

FSMO Roles of AD - DS

- Roles of AD - DS
- Transferring of Roles
- Seizing of Roles

Group Policy / System Policies

- User and Computer Policies
- Scope of Policies - OU, Domain, Sites
- Group Policy Modeling (RSOP)

Active Directory Trusts

- Introduction to Trust Relationship
- Categories, Directions & Types of Trusts
- Functional Levels
- Authentication Protocols Controller
- Sites and Global Catalog
- Replication between the Domain Controllers
- AD-DS Partitions
- Active Directory Recycle Bin

Dynamic Host Configuration Protocol (DHCP)

- Introduction and Configuration of DHCP Server
- DHCP Client Configuration
- Reservations

- DHCP Backup and Configuring DHCP Failover
- Configuring Forest Trusts between 2022 Forests

Domain Name System (DNS)

- Internet Basics, Host & LM Host Files
- DNS Naming Hierarchy
- Lookup Zones - Forward and Reverse lookup Zones
- Types of Zones – Primary, Secondary & Stub Zone
- Resource Records, Integration with ADS, SRV Records
- Forwarders, Dynamic Updates

Internet Information Services (IIS)

- IIS 10.0 Configuration
- Hosting Websites, Virtual Directories
- Redirecting Web Sites
- Backup & Restoring Sites
- FTP Sites

Windows Deployment Services

- Introduction and Configuration of WDS Server
- Attended and Unattended Installation

Microsoft Hyper-V

- Installation of Hyper - V
- Configuring Virtual Machine
- Configuring Virtual Networks
- Configuring Virtual Hard disks
- Configuring Hyper-V Replica

Remote Access Service

- Remote Access Server Configuration
- NAT and VPN – PPTP

Remote Desktop Services

- Remote Administration Mode
- Upgrading Windows Server 2016 to 2019/2022
- Configuring NLB cluster
- Overview of NAP

Storage Technologies

- Types of HDDs, partition creation, extension, shrinking, deletion
- Understanding File systems
- Introduction to Storage spaces and Storage Pools
- Configuring Simple Volume (RAID – 0)
- Configuring Mirror Volume (RAID – 1)
- Configuring Parity Volume (RAID – 5)
- Understanding iSCSI Target and Initiator

Windows Server Backup

- Data backup and restore
- Backup system state data (AD DS)
- Authoritative and Non-Authoritative restore