

MCSE Training Syllabus

Course Duration-100 hours

Managing and Maintaining a Microsoft Windows Server 2012/16:

- Managing Users, Computers and Groups
- Configure access to shared folders
- Managing and Maintaining a Server Environment
- Manage software update infrastructure
- Monitor file and print servers
- Manage a Web server using IIS
- Manage basic disks and dynamic disks
- Install and configure server hardware devices
- Managing and Implementing Disaster Recovery
- Manage backup procedures and recover from the backup
- Recover from server hardware failure

Implementing, Managing and maintaining a Microsoft Windows Server 2012/16 Network Infrastructure:

- Implementing, Managing and Maintaining IP Addressing
- Configure TCP/IP addressing on a server computer using DHCP
- Implementing, Managing and Maintaining Name Resolution using DNS Server
- Implementing, Managing and Maintaining Routing and Remote Access
- Configure remote access authentication protocols
- Implement secure access between private networks
- Manage Routing and Remote Access routing interfaces
- Maintaining a Network Infrastructure

Planning and Maintaining a Microsoft Windows Server 2012/16 Network Infrastructure:

- Planning and Implementing Server Roles and Server Security
- Planning, Implementing and Maintaining a Network Infrastructure
- Planning, Implementing and Maintaining Routing and Remote Access
- Planning, Implementing and Maintaining Server Availability
- Planning and Maintaining Network Security
- Planning, Implementing and Maintaining Security Infrastructure

Planning, Implementing and Maintaining a Microsoft Windows Server 2012/16 Active Directory Infrastructure:

- Planning and Implementing an Active Directory Infrastructure
- Evaluate network traffic considerations when placing global catalog servers
- Evaluate the need to enable universal group caching
- Managing and Maintaining an Active Directory Infrastructure
- Planning and Implementing User, Computer and Group Strategies
- Plan a user authentication strategy
- Plan a smart card authentication strategy
- Plan an OU structure
- Planning and Implementing Group Policy
- Managing and Maintaining Group Policy

- Troubleshoot the application of Group Policy security settings

Installing, Configuring and Administering Microsoft Windows 10 Professional:

- Installing Windows 10 Professional
- Implementing and Conducting Administration of Resources
- Manage and troubleshoot access to shared folders
- Connect to local and network print devices
- Implementing, Managing and Troubleshooting Hardware Devices and Drivers
- Monitoring and Optimizing System Performance and Reliability
- Configuring and Troubleshooting the Desktop Environment
- Implementing, Managing and Troubleshooting Network Protocols and Services
- Configuring, Managing and Troubleshooting Security
- Configure, manage and troubleshoot Internet Explorer security settings

Installing, Configuring and Administering Microsoft Windows 2012/16 Professional:

- Installing Windows 2012 Professional
- Implementing and Conducting Administration of Resources
- Implementing, Managing and Troubleshooting Hardware Devices and Drivers
- Monitoring and Optimizing System Performance and Reliability
- Configuring and Troubleshooting the Desktop Environment
- Implementing, Managing and Troubleshooting Network Protocols and Services
- Implementing, Monitoring and Troubleshooting Security

Designing a Microsoft Windows Server 2012/16 Active Directory and Network Infrastructure:

- Creating the Conceptual Design by Gathering and Analyzing Business and Technical Requirements
- Creating the Logical Design for an Active Directory Infrastructure
- Creating the Logical Design for a Network Services Infrastructure
- Creating the Physical Design for an Active Directory and Network Infrastructure
- Design a DNS service implementation
- Design a NetBIOS name resolution strategy
- Design a network and routing topology for a company
- Design Internet connectivity for a company

Designing Security for a Microsoft Windows Server 2012/16 Network:

- Creating the Conceptual Design for Network Infrastructure Security by Gathering and Analyzing Business and Technical Requirements
- Creating the Logical Design for Network Infrastructure Security
- Creating the Physical Design for Network Infrastructure Security
- Design a public key infrastructure (PKI) that uses Certificate Services
- Design security for network management Design security for wireless networks
- Design user authentication for Internet Information Services (IIS)
- Design security for communication between networks
- Designing an Access Control Strategy for Data
- Creating the Physical Design for Client Infrastructure Security

Installing, Configuring and Administering Microsoft Internet Security and Acceleration (ISA) Server 2012/16, Enterprise Edition:

- Installing ISA Server
- Install ISA Server
- Installation modes include integrated, firewall and cache
- Configuring and Troubleshooting ISA Server Services
- Configure and troubleshoot outbound Internet access
- Configure H 323 Gatekeeper for audio and video conferencing
- Configure and troubleshoot virtual private network (VPN) access
- Configuring, Managing and Troubleshooting Policies and Rules
- Create and configure access control and bandwidth policies
- Manage ISA Server arrays in an enterprise
- Deploying, Configuring and Troubleshooting the Client Computer
- Monitoring, Managing and Analyzing ISA Server Use
- Troubleshoot problems with security and network usage

Installing, Configuring and Administering Microsoft SQL Server 2012 Enterprise Edition:

- Installing and Configuring SQL Server 2012
- Upgrade to SQL Server 2012
- Create a linked server
- Configure network libraries
- Troubleshoot failed installations
- Creating SQL Server 2012 Databases
- Attach and detach databases
- Create and alter databases Perform disaster recovery operations
- Managing, Monitoring and Troubleshooting SQL Server 2012 Databases
- Extracting and Transforming Data with SQL Server 2012
- Managing and Monitoring SQL Server 2012 Security
- Managing, Monitoring and Troubleshooting SQL Server 2012
- Create, manage and troubleshoot SQL Server Agent jobs
- Monitor SQL Server system activity by using traces
- Monitor SQL Server system activity by using System Monitor

Implementing and Managing Microsoft Exchange Server 2012

- Installing, Configuring and Troubleshooting Exchange Server 2012
- Prepare the environment for deployment of Exchange Server 2012
- Install, configure and troubleshoot Exchange Server 2012
- Upgrade from Exchange Server 5.5 to Exchange Server 2012
- Migrate from other messaging systems to Exchange Server 2012
- Configure Exchange 2012 for inter-operability with other SMTP messaging systems
- Managing, Monitoring and Troubleshooting Exchange Server Computers
- Perform and troubleshoot backups and recovery
- Manage, monitor and troubleshoot data storage
- Manage and troubleshoot public folders
- Manage and troubleshoot virtual servers
- Manage and troubleshoot front-end and back-end servers
- Managing Security in the Exchange Environment
- Managing Recipient Objects and Address Lists

MAJOR TOPICS COVERED

- Installing Windows Server 2012
- NTFS File System & its Features
- IPV4 & IPV6
- DHCP Deployment & Configuration
- Installing Active Directory Domain Controllers
- Configuring Security Policies
- Designing an automated server installation strategy
- Plan and deploy Virtual Machine Manager services
- Designing an Active Directory permission model
- Planning and implementing failover clustering