MCSE: server infrastructure Syllabus

General Information

Description

The Microsoft Certified Solutions Expert (MCSE): Server Infrastructure course trains you to acquire the skills needed to run a highly efficient and modern data center, with expertise in identity management, systems management, virtualization, storage, and networking. It prepares you in the right way to take up Microsoft's MCSE certification. There are totally 5 papers that one has to write in order to get certified. Below given are the five papers.

Step	Paper	Required Exam
1	Installing and Configuring Windows Server 2012	70-410
2	Administering Windows Server 2012	70-411
3	Configuring Advanced Windows Server 2012 Services ⭐ After successfully completing steps 1-3, you'll earn a Microsoft Certified Solutions Associate (MCSA): Windows Server 2012 certification	70-412
4	Designing and Implementing a Server Infrastructure	70-413
5	Implementing an Advanced Server Infrastructure	70-414

This MCSE certification requires you to show continued ability to perform in your chosen solution area by completing a recertification exam every three years.

Course Deliverables

Classroom training

Instructor led classroom training will be given. All classes are demonstration based. We don't teach just theory. We teach every concept using real-time case studies. All our classrooms are digital classrooms.

Lab

Students can practice all the concepts taught in classrooms at our Lab facility. Each student will be given individual setup to practice the lab. They need not combine and do labs. Our lab coordinators will help you when you are doing the labs

Books and workbooks

Students will be a given textbooks and workbooks for the course

Course topics

Paper	Topic
70-410	Installing windows server 2012
	Disk Management – MBR, GPT, VHD, Basic disk, Dynamic disk, storage pool, disk pool
	NTFS file system and its features – file permissions, quota, VSS, offline files
	Hyper-V – Creating and configuring virtual machines
	Hyper-V – Creating and configuring virtual machine storage
	Hyper-V – Creating and configuring virtual networks
	IPv4 and IPv6
	DHCP – Deployment and configuration
	DNS – Forward and reverse lookup, primary/secondary/stub zone, forwarders, root hints, caching only DNS, Dynamic DNS.
	Installing Active Directory domain controllers
	Active Directory user, group, OU management
	Create and manage Group Policy objects (GPOs)
	Configure security policies
	Configure application restriction policies
	Configure Windows Firewall

Paper	Topic
70-411	Deploy and manage Windows Deployment Services (WDS)
	Install and configure Windows Server Update Service (WSUS)
	Configure DCS to monitor servers, VMs, networking, real time performance
	Configure Distributed File system (DFS)
	Configure File Server Resource Manager (FSRM)
	Configure file and disk encryption

Paper	Topic
	Configure routing
	Configure NAT
	Configure VPN
	Configure RADIUS servers
	Configure Network Access Protection
	FSMO roles
	Active Directory backup and restoration
	Active directory task delegation
	Active Directory object and container level recovery
	Advance Group Policy Object configuration and management

Paper	Topic
70-412	Configure Network Load Balancing (NLB)
	Configure failover clustering
	Manage Virtual Machine (VM) migration
	Configure advanced file services
	Implement Dynamic Access Control (DAC)
	Configure and optimize storage
	Configuring Windows server backup tool
	Bare metal recovery
	Understanding Windows booting and troubleshooting booting issues
	Configuring Hyper-V site level fault tolerance
	Advanced DHCP
	Advanced DNS
	Active Directory Forest trust relationship
	Active Directory sites and services
	Active Directory Certificate services
	Active Directory Rights Management Services (ADRMS)

70-413: 'Designing and implementing a server infrastructure' &

70-414: 'Implementing an Advanced Server Infrastructure' are design papers

Students are expected to come up with design solutions for various tasks and scenarios.

This paper is more oriented towards practicing in the lab.

Paper	Topic
70-413	Design an automated server installation strategy
	Plan and implement a server deployment infrastructure
	Plan and implement server upgrade and migration
	Plan and deploy Virtual Machine Manager services
	Plan and implement file and storage services
	Design and maintain a Dynamic Host Configuration Protocol (DHCP) solution
	Design a name resolution solution strategy
	Design and manage an IP address management solution
	Design a VPN solution
	Design a forest and domain infrastructure
	Design a Group Policy strategy
	Design an Active Directory permission model
	Design an Active Directory sites topology
	Design a domain controller strategy

Paper	Topic
70-414	Plan and implement failover clustering
	Plan and implement highly available network services
	Plan and implement highly available storage solution
	Plan and implement highly available server roles
	Plan and implement a business continuity and disaster recovery solution
	Plan and implement virtualization hosts
	Plan and implement virtualization guests

Paper	Topic
	Plan and implement virtualization networking
	Plan and implement virtualization storage
	Plan and implement virtual guest movement