TechyEdz Solutions

Training | Consulting | Developement | Outsourcing

MCSA + VMware

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MCSA + VMware Combo Course

✚ Course Overview:

If you're ready to learn how to save money and to help increase efficiency using the built-in virtualization capabilities of Windows Server, you're in the right place. These learning opportunities can help you get started quickly—from product exploration to deep training and certification. This program intended for non programmers who do not wants to get into complexity of learning programming languages. Suitable for both IT and Non IT candidates. A Well organized program with Job oriented POC's, Real Time Projects, Well organized Assignments with solutions. Get certified, and show the world that you're ready to virtualize your workloads, increase efficiency, and streamline your IT infrastructure. This course will help you understand and implement the components of the Hyper-V role. This includes how to implement virtualization

70-740: Installation, Storage, and Compute with Windows Server 2016

- ➢ Install Windows Servers in Host and Compute Environments
- ➢ Implement Storage Solutions
- ➢ Implement Hyper-V
- ➢ Implement Windows Containers
- ➢ Implement High Availability
- ➢ Maintain and Monitor Server Environments

70-741: Networking with Windows Server 2016

- ➢ Implement Domain Name System (DNS)
- ➢ Implement DHCP and IPAM
- ➢ Implement Network Connectivity and Remote Access Solutions
- ➢ Implement Core and Distributed Network Solutions
- ➢ Implement an Advanced Network Infrastructure

70-742: Identity with Windows Server 2016

➢ Install and Configure Active Directory Domain Services (AD DS)

➢ Manage and Maintain AD DS

➢ Create and Manage Group Policy

➢ Implement Active Directory Certificate Services (AD CS)

➢ Implement Identity Federation and Access Solutions

VMware vSphere: Install, Configure, Manage [V6.7]

➕ **Course Outline:**

1. **Course Introduction**
   - ➢ Introductions and course logistics
   - ➢ Course objectives
   - ➢ Describe the content of this course
   - ➢ Gain a complete picture of the VMware certification system
   - ➢ Familiarize yourself with the benefits of the VMware Education Learning Zone
   - ➢ Identify additional resources

2. **Introduction to vSphere and the Software-Defined Data Centre**
   - ➢ Describe the topology of a physical data centre
   - ➢ Explain the vSphere virtual infrastructure
   - ➢ Define the files and components of virtual machines
   - ➢ Describe the benefits of using virtual machines
   - ➢ Explain the similarities and differences between physical architectures and virtual architectures
   - ➢ Define the purpose of ESXi
   - ➢ Define the purpose of vCentre Server
   - ➢ Explain the software-defined data centre
   - ➢ Describe private, public, and hybrid clouds

3. **Creating Virtual Machines**
   - ➢ Introduce virtual machines, virtual machine hardware, and virtual machine files

- ➢ Identify the files that make up a virtual machine
- ➢ Discuss the latest virtual machine hardware and its features
- ➢ Describe virtual machine CPU, memory, disk, and network resource usage
- ➢ Explain the importance of VMware Tools™
- ➢ Discuss PCI pass-through, Direct I/O, remote direct memory access, and NVMe
- ➢ Deploy and configure virtual machines and templates
- ➢ Identify the virtual machine disk format

4. **vCentre Server**
- ➢ Introduce the vCentre Server architecture
- ➢ Deploy and configure vCentre Server Appliance
- ➢ Use vSphere Web Client
- ➢ Backup and restore vCentre Server
- ➢ Examine vCentre Server permissions and roles
- ➢ Explain the vSphere HA architectures and features
- ➢ Examine the new vSphere authentication proxy
- ➢ Manage vCentre Server inventory objects and licenses
- ➢ Access and navigate the new vSphere clients

5. **Configuring and Managing Virtual Networks**
- ➢ Describe, create, and manage standard switches
- ➢ Configure virtual switch security and load-balancing policies
- ➢ Contrast and compare vSphere distributed switches and standard switches
- ➢ Describe the virtual switch connection types
- ➢ Describe the new TCP/IP stack architecture
- ➢ Use VLANs with standard switches

6. **Configuring and Managing Virtual Storage**
- ➢ Introduce storage protocols and storage device types
- ➢ Discuss ESXi hosts using iSCSI, NFS, and Fibre Channel storage
- ➢ Create and manage VMFS and NFS data stores
- ➢ Describe the new features of VMFS 6.5
- ➢ Introduce vSAN
- ➢ Describe guest file encryption

7. **Virtual Machine Management**
- ➢ Use templates and cloning to deploy new virtual machines
- ➢ Modify and manage virtual machines

- ➤ Clone a virtual machine
- ➤ Upgrade virtual machine hardware to version 12
- ➤ Remove virtual machines from the vCentre Server inventory and datastore
- ➤ Customize a new virtual machine using customization specification files
- ➤ Perform vSphere vMotion and vSphere Storage vMotion migrations
- ➤ Create and manage virtual machine snapshots
- ➤ Create, clone, and export vApps
- ➤ Introduce the types of content libraries and how to deploy and use them

8. **Resource Management and Monitoring**
- ➤ Introduce virtual CPU and memory concepts
- ➤ Explain virtual memory reclamation techniques
- ➤ Describe virtual machine over commitment and resource competition
- ➤ Configure and manage resource pools
- ➤ Describe methods for optimizing CPU and memory usage
- ➤ Use various tools to monitor resource usage
- ➤ Create and use alarms to report certain conditions or events
- ➤ Describe and deploy resource pools
- ➤ Set reservations, limits, and shares
- ➤ Describe expandable reservations
- ➤ Schedule changes to resource settings
- ➤ Create, clone, and export vApps
- ➤ Use vCentre Server performance charts and esxtop to analyze vSphere performance

9. **vSphere HA, vSphere Fault Tolerance, and Protecting Data**
- ➤ Explain the vSphere HA architecture
- ➤ Configure and manage a vSphere HA cluster
- ➤ Use vSphere HA advanced parameters
- ➤ Define clusterwide restart ordering capabilities
- ➤ Enforce infrastructural or intra-app dependencies during failover
- ➤ Describe vSphere HA heartbeat networks and datastore heartbeats
- ➤ Introduce vSphere Fault Tolerance
- ➤ Enable vSphere Fault Tolerance on virtual machines
- ➤ Support vSphere Fault Tolerance interoperability with vSAN
- ➤ Examine enhanced consolidation of vSphere Fault Tolerance virtual machines
- ➤ Introduce vSphere Replication

➢ Use vSphere Data Protection to back up and restore data

10. vSphere DRS

➢ Describe the functions and benefits of a vSphere DRS cluster
➢ Configure and manage a vSphere DRS cluster
➢ Work with affinity and anti-affinity rules
➢ Describe the new capabilities for what-if analysis and proactive vSphere DRS
➢ Highlight the evolution of vSphere DRS using predictive data from VMware vRealize Operations Manager
➢ Perform preemptive actions to prepare for CPU or memory changes
➢ Describe the vCentre Server embedded vSphere Update Manager, VMware vSphere ESXi Image Builder CLI, and VMware vSphere Auto Deploy capabilities
➢ Use vSphere HA and vSphere DRS together for business continuity

11. vSphere Update Manager

➢ Describe the new vSphere Update Manager architecture, components, and capabilities
➢ Use vSphere Update Manager to manage ESXi, virtual machine, and vApp patching
➢ Install vSphere Update Manager and the vSphere Update Manager plug-in
➢ Create patch baselines
➢ Use host profiles to manage host configuration compliance
➢ Scan and remediate hosts

➕ Prerequisites:

• Knowledge and skills concerning the initial implementation and configuration of core Windows Server services including Active Directory Domain Services (AD DS), Networking Services and Microsoft Hyper-V

• Experience working with Windows Server 2008 or Windows Server 2012 servers day to day in an Enterprise environment.

➕ Who Should Attend:

• All students who start their Microsoft servers study.

• Students who wants to get in to Virtualization technology

- Help Desk who wants to improve to next level as a system admin.

- System admins and engineers who want to study server 2016 in details

- All professional who want to be ready for their MCSA 2016 certificates.

Number of Hours: 70hrs

Certification: VCA, VCP, 70-740, 70-741 & 70-742

Key Features:

➢ One to One Training
➢ Online Training
➢ Fastrack & Normal Track
➢ Resume Modification
➢ Mock Interviews
➢ Video Tutorials
➢ Materials
➢ Real Time Projects
➢ Virtual Live Experience
➢ Preparing for Certification