

## vSphere 6 – ICM (Install, Configure and Manage)

### Overview:

VMware vSphere: Install, Configure, Manage features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere 6, which includes VMware ESXi™ 6 and VMware vCenter Server™ 6. This course prepares you to administer a vSphere infrastructure for an organization of any size and forms the foundation for most other VMware technologies in the software-defined data center.

1. Software-Defined Data Center
  - Introduction to Virtualization
  - Introduce components of the software-defined data center
  - Install and use vSphere Client
2. ESX – In and Out
  - Overview of ESXi, ESX vs ESXi
  - Installation and configuration of ESX
  - Installation and working with vSphere client
  - vSphere client - Discover ESX
3. Configuring and Managing Virtual Networks
  - Introduction to Virtual networking
  - Describe, create, and manage standard switches
  - Configure virtual switch security and load-balancing policies
  - Create, configure, and manage vSphere vDS, network connections, and port groups
4. Configuring and Managing Virtual Storage
  - Introduce storage protocols and storage device types
  - Discuss ESXi hosts using iSCSI and NFS storage
  - Create and manage VMFS and NFS datastores
  - Introduce VMware Virtual SAN™
  - Introduce Virtual Volumes
5. vCenter Server
  - Describe vCenter Server hardware, software, and database requirements
  - Introduce the vCenter Server architecture
  - Introduce vCenter Server deployment options
  - Deploy and configure VCSA vs Windows based vCenter
  - Use vSphere Web Client
  - Manage vCenter Server inventory objects and licenses
6. Virtual Machine Management
  - Introduce virtual machines, virtual machine hardware, and virtual machine files
  - Use templates and cloning to deploy new virtual machines
  - Modify and manage virtual machines
  - Perform vSphere vMotion and vSphere Storage vMotion migrations
  - Create and manage virtual machine snapshots
  - Create vApps
  - Introduce the types of content libraries and how to deploy and use them

7. Resource Management and Monitoring
  - Introduce virtual CPU and memory concepts
  - 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
  - Identify and troubleshoot virtual machine resource issues
8. vSphere HA and DRS
  - Explain the vSphere HA architecture
  - Configure and manage a vSphere HA cluster
  - Use vSphere HA advanced parameters
  - Describe the functions and benefits of a vSphere DRS cluster
  - Configure and manage a vSphere DRS cluster
  - Work with affinity and anti-affinity rules
  - Use vSphere HA and vSphere DRS together for business continuity
9. vSphere Upgrades and Migrations
  - Install vSphere Update Manager and the vSphere Update Manager plug-in
  - Use vSphere Update Manager to manage ESXi patching
  - Create patch baselines
  - vSphere Upgrade to 6
  - P2V Migration