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## VMware vSphere: Design

**Duration: 3 Days    Course Code: VSD    Version: 7.0    Delivery Method: Virtual Learning**

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### Overview:

This three-day VMware design training course equips you with the knowledge, skills, and abilities to design a VMware vSphere® 7 virtual infrastructure. You follow a proven approach to design a virtualization solution that ensures availability, manageability, performance, recoverability, and security, and that uses VMware best practices. This course discusses the benefits and risks of available design alternatives and provides information to support making sound design decisions.

You will be given a case study, in order to practice your design skills by working with peers on a design project.

This course aligns to the following products: VMware ESXi™ 7, VMware vCenter Server® 7

**Please Note:** This training is also suitable for students who want to be trained on vSphere v6.5 or v6.7.

### Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

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### Target Audience:

Experienced system integrators and consultants responsible for designing and deploying vSphere environments

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### Objectives:

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| ■ <b>After completing this course you should be able to:</b>  | ■ Design the core management infrastructure for an enterprise                   |
| ■ Identify the business objectives for the vSphere environment  | ■ Design the virtual data center for an enterprise                              |
| ■ Identify business requirements, constraints, assumptions, and risks for all layers in the vSphere environment | ■ Design the compute infrastructure for an enterprise                           |
| ■ Apply a framework to a design   | ■ Design the storage and networking infrastructures for an enterprise           |
| ■ Analyze design choices and best-practice recommendations  | ■ Design virtual machines to run applications in a vSphere infrastructure       |
| ■ Create a design that ensures availability, manageability, performance, recoverability, and security           | ■ Design security, manageability, and recoverability features for an enterprise |
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### Prerequisites:

**Attendees should have completed the following courses:**

- VSICM - VMware vSphere: Install, Configure, Manage
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## Content:

### Course Introduction

- Introductions and course logistics
- Course objectives

### Infrastructure Assessment

- Follow a proven process to design a virtualization solution
- Define customer business objectives
- Gather and analyze business and application requirements
- Document design requirements, constraints, assumptions, and risks
- Use a systematic method to evaluate and document design decisions
- Create a conceptual design

### Core Management Infrastructure

- Determine the number of VMware vCenter® Server Appliance™ instances to include in a design
- Choose the appropriate single sign-on identity source
- Choose the time synchronization method
- Choose methods to collect log files and VMware ESXi™ core dumps
- Design a vCenter Server deployment topology that is appropriate for the size and requirements of the datacenter

### Virtual Data Center Infrastructure

- Calculate total compute capacity requirements for a virtual data center
- Create a virtual data center cluster design that meets business and workload requirements
- Evaluate in the virtual data center the use of several management services, such as VMware vSphere®
- High Availability and VMware vSphere® Distributed Resource Scheduler™
- Evaluate the use of resource pools in the virtual data center design

### Compute Infrastructure

- Create a compute infrastructure design that includes the appropriate ESXi boot, installation, and configuration options
- Choose the ESXi host hardware for the compute infrastructure

### Storage Infrastructure

- Calculate storage capacity and performance requirements for a design
- Evaluate the use of different storage platforms and storage management solutions
- Design a storage platform infrastructure and storage management architecture that meets the needs of the vSphere environment

### Network Infrastructure

- Evaluate the use of different network component and network management solutions
- Design a network component architecture that includes information about network segmentation and virtual switch types
- Design a network management architecture that meets the needs of the vSphere environment

### Virtual Machine Design

- Make virtual machine design decisions, including decisions about resources
- Design virtual machines that meet the needs of the applications in the vSphere environment and follow VMware best practices

### Infrastructure Security

- Make security design decisions for various layers in the vSphere environment
- Design a security strategy that meets the needs of the vSphere environment and follows VMware best practices

### Infrastructure Manageability

- Make infrastructure manageability design decisions that adhere to business requirements
- Design an infrastructure manageability strategy that meets the needs of the vSphere environment and follows VMware best practices

### Infrastructure Recoverability

- Make infrastructure recoverability design decisions that adhere to business requirements
- Design an infrastructure recoverability strategy that meets the needs of the vSphere environment and follows VMware best practices

## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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