London TDM

Information Technology and Digital Transformation Training Courses

Course Venue: United Kingdom - London

Course Date: From 15 March 2026 To 19 March 2026

Course Place: London Paddington

Course Fees: 7,500 USD

Introduction

The "Virtualization and Data Center Management" course offers an immersive experience into the technologies and strategies that drive modern data centers. Participants will explore the essentials of virtualization, best practices in data center management, and the latest advancements in this rapidly evolving field. This course is designed to equip IT professionals with the knowledge and skills necessary to efficiently manage and optimize data center operations.

Objectives

- Understand the fundamentals of virtualization and its role in modern data centers.
- Learn to implement and manage virtual environments effectively.
- Explore the architecture and components of advanced data centers.
- Identify strategies for optimizing data center performance and efficiency.
- Gain practical skills for troubleshooting and problem-solving in virtualized environments.

Course Outlines

Day 1: Introduction to Virtualization

- Overview of virtualization concepts and benefits
- Types of virtualization: server, network, storage
- Understanding hypervisors and their functions
- Virtual machine (VM) architecture and management
- Hands-on lab: Setting up a basic virtual machine

Day 2: Virtualization Technologies and Platforms

- Introduction to leading virtualization platforms: VMware, Hyper-V, and KVM
- Comparative analysis of platform features
- Creating and managing VMs using different platforms
- Understanding virtualization networking
- Lab session: Deploying VMs on various platforms

Day 3: Data Center Architecture and Management

- Key components of modern data centers
- Data center infrastructure management (DCIM) tools
- Best practices in data center cooling, power, and layout
- Security considerations in data center management
- Case study: Analyzing a state-of-the-art data center

Day 4: Optimizing Data Center Operations

- Performance tuning and capacity planning
- Automation tools in data center operations
- Monitoring and logging for efficiency
- Cost management and ROI analysis
- Workshop: Implementing an optimization strategy

Day 5: Troubleshooting and Future Trends

- Common issues and troubleshooting techniques in virtual environments
- Disaster recovery planning and implementation
- The future of virtualization and data centers: edge computing and beyond
- Innovations in green data center technologies
- Final project: Designing a virtualized data center solution