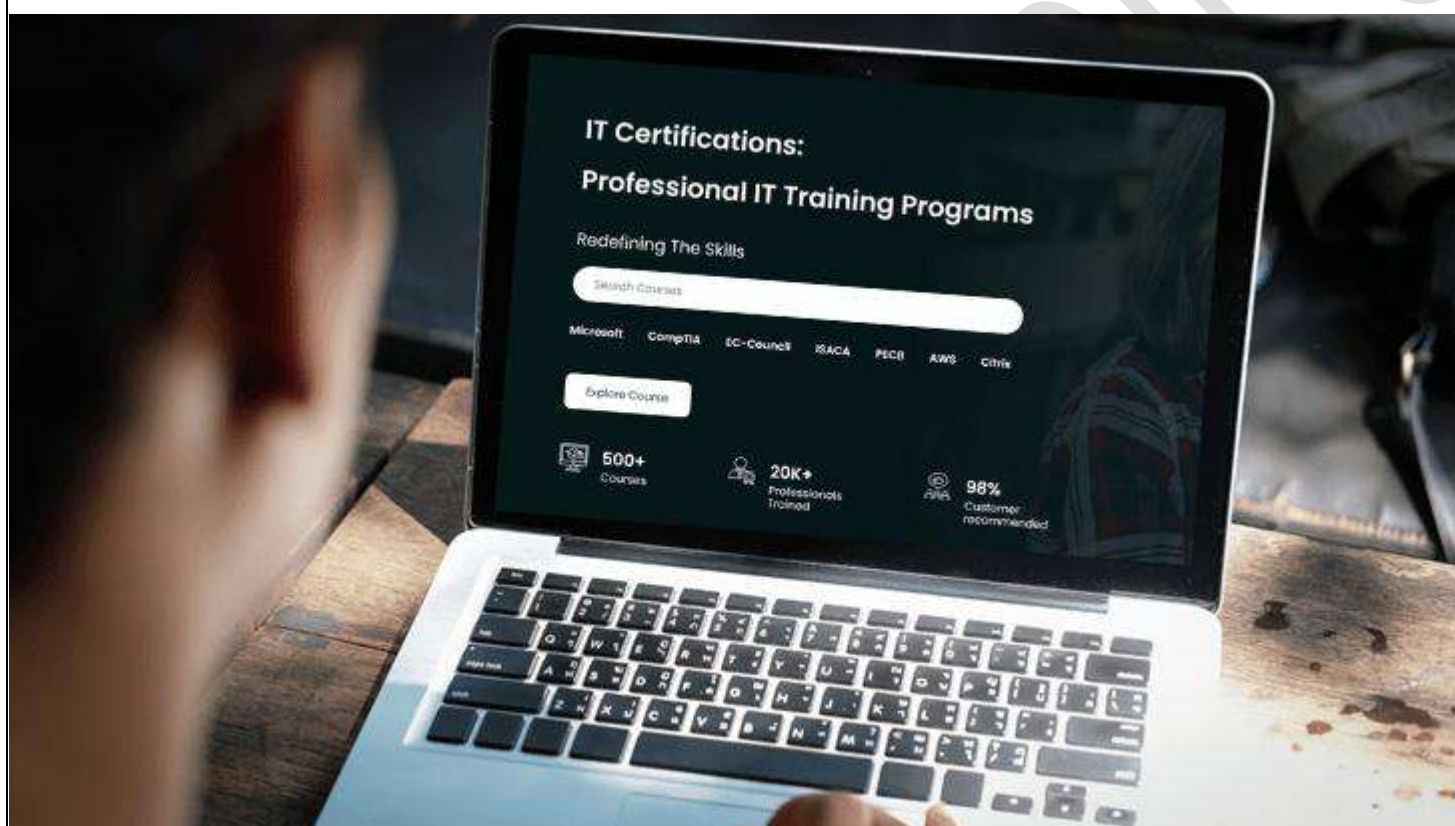




Redefining The Skills



55247: DESIGNING AND IMPLEMENTING CLOUD DATA PLATFORM SOLUTIONS TRAINING

Duration: 3 Days

Course Description

55247: Designing and Implementing Cloud Data Platform Solution Training is aimed at helping professionals develop a core understanding of designing and implementing database solutions on Microsoft Azure and SQL Servers. This technical training demonstrates various options, which include disaster, recovery, availability, security, monitoring, and troubleshooting.

In this course, you will learn the process of building security solutions for cloud databases. You will also learn about configuring high availability, scalability, and disaster recovery options for databases. This training program is specifically suitable for data professionals whose work includes designing and implementing on-premises and Azure Data Solutions.

Our enterprise training program allows a team upgrade with a skill set that leads to the firm's overall development. By the end of the course, individuals will know how to build Microsoft Azure data solutions and SQL Server while managing and monitoring database solutions.

This training is designed based on the objectives of the course variant 55247A.

Who should attend this course?

- This is professional training aimed at those who have experience in designing big data analytics solutions on Microsoft Azure.
- Given below are professionals who can use Designing and Implementing Cloud Data Platform Solutions Training to upskill their current positions:
 - Cloud Solution Architects
 - IT Professionals
 - Data Analyst
 - System Engineers
 - IT Project Managers
 - Data Architects
 - Database Administrators

What you will learn

- Creating Microsoft Azure and SQL Server data solutions
- Creating Security solutions for cloud databases and on-premises
- Configuring Scalability, Disaster Recovery, and High-Availability options for databases
- Automating, Managing, and Monitoring database solutions
- Deploy and manage Linux in an Azure Cloud environment.

Prerequisites

- Familiarity with Microsoft Windows Operating System and its core functionality is beneficial.
- Understanding of basic SQL syntax and database design principles is an advantage.
- A basic experience with cloud computing concepts and technologies, specifically Microsoft Azure.
- A basic understanding of data storage and management within cloud environments.

Curriculum

Module 1: Getting started with Azure This module explains what Azure is, how to open an account, and deploy your first Linux instance.

Lessons

- Getting started with Azure
- Linux Virtual Machines
- Linux & Open-Source Fundamentals
- Working With Shells
- Users, Groups and Permissions
- Sudo
- Software Management
- Storage
- Networking
- Systemd
- Logging
- AD Integration
- Securing Linux with MAC

Lab : Module 1 Labs

- Deploy an Ubuntu VM and install Azure client
- Create an Azure Linux instance from the Cloud Shell
- Install an SSH client
- Create users and groups
- Sudo, users and permissions
- Adding storage
- Networking and checking IP address
- Installing vsftpd
- Logging
- Active Directory integration
- Configure MAC on your system

After completing this module, students will be able to:

- Deploy a Virtual Machine and create an Azure Linux instance on it
- Understand the fundamentals of Linux and Open Source Software
- Understand and put into use the tools needed to run the Azure instance efficiently and securely

Module 2: Containers This module explains where containers come from, why they are useful, what components make up container technologies, and how different container technologies compare to each other.

Lessons

- Why Containers
- Container Components
- Comparing Container Technologies
- Creating and Running Docker Containers
- Orchestrating Containers
- Docker Compose
- Docker Machine
- Docker VM-Extension
- Azure Container Services
- Working with Docker on Azure

Lab: Module 2 Labs

- Install docker files

After completing this module, students will be able to:

- Install and work with Docker on Azure

Module 3: Deploy Linux on Azure This module explores the many ways to deploy Linux on Azure.

Lessons

- Understanding Deployment Options
- Azure Resource Manager
- Creating Virtual Machine Images
- Azure Virtual Machine Agent
- Azure Virtual Machine Extensions
- Azure Virtual Machine Extensions Using Docker Machine

Lab : Module 3 Labs

- Use ARM to deploy a VM
- Verify the Azure VM Agent is running

After completing this module, students will be able to:

- Use tools to build Virtual Machines in Azure

Module 4: Automation & Orchestration This module explains what “Dev Ops” is and become familiar with the tools used to automate development processes.

Lessons

- DevOps and Automation
- Cloud-init
- Ansible
- Salt
- Puppet
- Chef

Lab : Module 4 Labs

- Use Chef to generate a cookbook

After completing this module, students will be able to:

- Install and configure common dev ops tools.

Module 5: Monitoring and Troubleshooting This module explains how to monitor your Azure instance and troubleshoot issues.

Lessons

- Monitor and Troubleshoot – popular methods

After completing this module, students will be able to:

- Access the trouble shooting section through Azure portal and diagnose/solve issues on the affected VM

For any query Contact Us – Microtek Learning
