

AZ-305: Designing Microsoft Azure Infrastructure Solutions

Duration: 24 Hours (6 sessions x 4 hours or 8 sessions x 3 hours)

Certification Level: Microsoft Certified: Azure Solutions Architect Expert

Course Overview:

This course provides in-depth knowledge on designing solutions using **Microsoft Azure**. Participants will learn how to design infrastructure solutions for compute, storage, network, identity, and security, along with optimizing and managing Azure resources effectively.

Course Objectives:

By the end of this course, participants will:

Design Azure infrastructure solutions including compute, storage, network, and security.

Implement solutions for identity, authentication, security, and compliance.

Monitor, manage, and optimize Azure resources for performance and cost efficiency.

Prepare for the **AZ-305 certification exam**.

Course Modules:

Module 1: Introduction to Azure Architecture & Design (4 hours)

Overview of Azure core components and architecture

Cloud computing principles and Azure fundamentals

Designing for scalability, availability, and disaster recovery

Module 2: Designing Identity & Security (4 hours)

Azure Active Directory and Multi-Factor Authentication (MFA)

Network security design: Firewalls, VPN, and Network Security Groups (NSGs)

Securing data with Azure encryption and Key Vault

Module 3: Designing for Azure Compute & Storage Solutions (4 hours)

Virtual Machines, Azure App Services, and Containers

Designing high availability and disaster recovery for storage solutions

Cost management and performance optimization for storage solutions

Module 4: Designing Network Solutions (4 hours)

Azure networking fundamentals: Virtual Networks (VNet), Subnets, Peering, VPN

Load balancing and traffic management

Hybrid networking design considerations

Module 5: Monitoring and Optimization (4 hours)

Implementing Azure Monitor for performance tracking

Managing resources with Azure Cost Management

Designing for performance and cost efficiency in Azure

Module 6: Exam Preparation and Case Studies (4 hours)

Review of common exam topics

Real-world Azure infrastructure design case studies

Practice questions and test-taking tips

Target Audience:

This course is designed for:

IT professionals looking to specialize in **Azure solutions architecture**

Individuals preparing for the **AZ-305 certification exam**

Professionals aiming to build a career as a **Microsoft Certified: Azure Solutions Architect Expert**

Certification:

Upon successful completion of the course, participants will be prepared for the **AZ-305 exam** and earn the **Microsoft Certified: Azure Solutions Architect Expert** certification.