

Designing Microsoft Azure Infrastructure Solutions

Course Duration: 32 Hrs.

Course Code: AZ-305

Course Overview

The AZ-305 certification course focuses on designing and implementing Microsoft Azure infrastructure solutions, covering topics like governance, computing, storage, networking, security, and business continuity, preparing candidates for the AZ-305 exam and the Azure Solutions Architect Expert certification

What you'll learn?

The AZ-305 exam, Designing Microsoft Azure Infrastructure Solutions, will teach you to design and implement robust, secure, and scalable solutions on Microsoft Azure, covering areas like identity, governance, data storage, business continuity, and infrastructure solutions.

Target Audience

- ❖ IT professionals with experience in Azure administration, development, and DevOps processes.
- ❖ Individuals who design and implement solutions in Azure, advise stakeholders, and translate business requirements into secure, scalable, and reliable cloud solutions.
- ❖ Those aiming to become Azure Solutions Architect Experts.

Pre-Requisites

- ❖ While not mandatory, having the Azure Administrator Associate certification is recommended.
- ❖ Experience with Azure virtual machines, storage, and networking is beneficial.
- ❖ Familiarity with IT operations, including networking, virtualization, identity, security, business continuity, disaster recovery, data platforms, and governance is also recommended.

Course Content

Design Identity, Governance, and Monitoring Solutions (25–30%)

Design Solutions for Logging and Monitoring

- Recommend a logging solution
- Recommend a solution for routing logs
- Recommend a monitoring solution

Design Authentication and Authorization Solutions

- Recommend an authentication solution
- Recommend an identity management solution
- Recommend a solution for authorizing access to Azure resources
- Recommend a solution to manage secrets, certificates, and keys

Design Governance

- Recommend a structure for management groups, subscriptions, and resource groups, and a strategy for resource tagging
- Recommend a solution for managing compliance
- Recommend a solution for identity governance

Design Data Storage Solutions (20–25%)

Design Data Storage Solutions for Relational Data

- Recommend a solution for storing relational data
- Recommend a database service tier and compute tier
- Recommend a solution for database scalability
- Recommend a solution for data protection

Design Data Storage Solutions for Semi-Structured and Unstructured Data

- Recommend a solution for storing semi-structured data
- Recommend a solution for storing unstructured data
- Recommend a data storage solution to balance features, performance, and costs
- Recommend a data solution for protection and durability

Design Data Integration

- Recommend a solution for data integration
- Recommend a solution for data analysis

Design Business Continuity Solutions (15–20%)

Design Solutions for Backup and Disaster Recovery

- Recommend a recovery solution for Azure and hybrid workloads that meets recovery objectives
- Recommend a backup and recovery solution for compute
- Recommend a backup and recovery solution for databases
- Recommend a backup and recovery solution for unstructured data

Design for High Availability

- Recommend a high availability solution for compute
- Recommend a high availability solution for relational data
- Recommend a high availability solution for semi-structured and unstructured data

Design Infrastructure Solutions (30–35%)

Design Compute Solutions

- Specify components of a compute solution based on workload requirements
- Recommend a virtual machine-based solution
- Recommend a container-based solution
- Recommend a serverless-based solution
- Recommend a compute solution for batch processing

Designing an Application Architecture

- Recommend a messaging architecture
- Recommend an event-driven architecture
- Recommend a solution for API integration
- Recommend a caching solution for applications
- Recommend an application configuration management solution
- Recommend an automated deployment solution for applications

Design Migrations

- Evaluate a migration solution that leverages the Microsoft Cloud Adoption Framework for Azure
- Evaluate on-premises servers, data, and applications for migration
- Recommend a solution for migrating workloads to Infrastructure as a Service (IaaS) and Platform as a Service (PaaS)
- Recommend a solution for migrating databases
- Recommend a solution for migrating unstructured data

Design Network Solutions

- Recommend a connectivity solution that connects Azure resources to the internet
- Recommend a connectivity solution that connects Azure resources to on-premises networks
- Recommend a solution to optimize network performance
- Recommend a solution to optimize network security
- Recommend a load-balancing and routing solution

Exam Preference

Exam Code	AZ-305
Exam Duration	120 minutes
Total Score	1000
Passing Score	700

