AZ-304: Microsoft Azure Architect Design [AZ-304T00-A] training including Exam Voucher

Group Training

Training code	CGAAZ304CE
Spoken Language	English
Language Materials	English
Dayparts	8
Price	€2.050,00 excl. VAT No extra costs.

What is AZ-304: Microsoft Azure Architect Design [AZ-304T00-A] including Exam Voucher

This course teaches Solutions Architects how to translate business requirements into secure, scalable, and reliable solutions. Lessons include design considerations related to logging, cost analysis, authentication and authorization, governance, security, storage, high availability, and migration. This role requires decisions in multiple areas that affect an overall design solution. This course uses MOC (Microsoft Official Courseware) and will be given by an experienced MCT (Microsoft Certified Trainer).
See the below modules for more information:
Module 1: Design a Compute Solution
In this module, you will learn about the appropriate compute technologies, including virtual machines, App Services, Service Fabric, Azure Functions, Windows Virtual Desktop, and containers.
Lessons

- Recommend a Solution for Compute Provisioning
- Determine Appropriate Compute Technologies
- Recommend a Solution for Containers
- Recommend a Solution for Automating Compute Management

Module 2: Design a Network Solution
In this module, you will learn about solutions for network addressing and name resolution,

network provisioning, and network security.

Lessons

- Recommend a Solution for Network Addressing and Name Resolution
- Recommend a Solution for Network Provisioning
- Recommend a Solution for Network Security
- Recommend a Solution for iInternete Connectivity and On-Premises Networks
- Recommend a Solution for Automating Network Management
- Recommend a Solution for Load Balancing and Rraffic Routing

Module 3: Design for Migration

In this module, you will learn about recommend a solution for migrating applications and VMs and a solution for migration of databases.

Lessons

- Assess and On-Premises Servers and Applications for Migration
- Recommend a Solution for Migrating Applications and VMs
- Recommend a Solution for Migration of Databases

Module 4: Design Authentication and Authorization

In this module, you will learn how to provide Identities to services and understand the hierarchy of Management Groups and Subscriptions.

Lessons

- Tips for Identity and Access Management
- Recommend a Solution for Multi-Factor Authentication
- Five Steps for Securing Identity Infrastructure
- Recommend a Solution for Single-Sign On (SSO)
- Recommend a Solution for a Hybrid Identity
- Recommend a Solution for B2B Integration
- Recommend a Hierarchical Structure for Management Groups

Module 5: Design Governance

In this module, you will learn apply an Azure Policy, Identify non-compliant resources, and manage tag governance with Azure Policy.

Lessons

- Recommend a Solution for using Azure Policy
- Recommend a Solution for using Azure Blueprint

Module 6: Design a Solution for Databases

In this module, you will be able to recommend the appropriate data store and recommend Azure SQL Database and Azure SQL Managed Instance Service tiers.

Lessons

- Select an Appropriate Data Platform Based on Requirements
- Overview of Azure Data Storage
- Recommend Database Service Tier Sizing
- Dynamically Scale Azure SQL Database and Azure SQL Managed Instances
- Recommend a Solution for Encrypting Data at Rest, Transmission, and In Use

Module 7: Select an Appropriate Storage Account

In this module, you will learn about recommend a design a strategy for using tiered storage and

manage tiered Storage using Azure tools.

Lessons

- Understanding Storage Tiers
- Recommend a Storage Access Solution
- Recommend Storage Management Tools

Module 8: Design Data Integration

In this module, you will learn about data flows using Azure Data Factory and Azure Synapse Analytics architecture.

Lessons

- Recommend a Data Flow
- Recommend a Solution for Data Integration

Module 9: Design a Solution for Logging and Monitoring

In this module, you will learn about Azure Monitor, Azure Application Insights, and Azure Sentinel. You will be able to monitor Azure Resources with Azure Monitor and collect and analyze resource Logs for Azure.using Azure tools.

Lessons

- Azure Monitoring Services
- Azure Monitor

Module 10: Design a Solution for Backup and Recovery

In this module, you will learn about solutions for site recovery capacity and site failover and failback. You will be able to recommend solutions for recovery in different regions.

Lessons

- Recommend a Recovery Solution for Hybrid and On-Premises Workloads
- Design and Azure Site Recovery Solution
- Recommend a Solution for Recovery in Different Regions
- Recommend a Solution for Azure Backup Management
- Design a Solution for Data Archiving and Retention

Module 11: Design for High Availability

In this module, you will learn about solutions for application and workload redundancy, including compute, database, and storage.

Lessons

- Recommend a Solution for Application and Workload Redundancy
- Recommend a Solution for Autoscaling
- Identify Resources that Require High Availability
- Identify Storage Tpes for High Availability
- Recommend a Solution for Geo-Redundancy of Workloads

Module 12: Design for Cost Optimization

In this module, you will learn how to optimize costs from recommendations, breakdown costs by Azure Service, and download and review usage details. 01-View

Lessons

- Recommend Solutions for Cost Management
- Recommended Viewpoints for Minimizing Costs

Module 13: Design an Application Architecture
In this module, you will learn about solution for deployment of applications including ARM templates, Logic Apps, or Azure Functions. You will also learn about microservices architecture including Event Grid, Event Hubs, Service Bus, Storage Queues, Logic Apps, Azure Functions, and webhooks.
Lessons

- Recommend a Microservices Architecture
- Recommend an Orchestration Solution for Deployment of Applications
- Recommend a Solution for API Integration

Module 14: Design Security for Applications
In this module, you will learn about solution for deployment of applications including ARM templates, Logic Apps, or Azure Functions. You will also learn about microservices architecture including Event Grid, Event Hubs, Service Bus, Storage Queues, Logic Apps, Azure Functions, and webhooks.
Lessons

- Security for Applications and Services
- Recommend a Solution using Key Vault
- Recommend Solutions using Azure AD Managed Identities

Who should attend the AZ-304: Microsoft Azure Architect Design [AZ-304T00-A] including Exam Voucher

This course is for IT Professionals with expertise in designing and implementing solutions running on Microsoft Azure. They should have broad knowledge of IT operations, including networking, virtualization, identity, security, business continuity, disaster recovery, data platform, budgeting, and governance. Azure Solution Architects use the Azure Portal and as they become more adept they use the Command Line Interface. Candidates must have expert-level skills in Azure administration and have experience with Azure development processes and DevOps processes. Responsibilities for an Azure Solution Architect include advising stakeholders and translating business requirements into secure, scalable, and reliable cloud solutions.
An Azure Solution Architect partners with cloud administrators, cloud DBAs, and clients to implement solutions.
Also, you will receive an Exam Voucher. Enlist today!

Prerequisites

Successful Azure Architects begin this role with experience on operating systems, virtualization, cloud infrastructure, storage structures, networking, applications and databases.
Understanding of on-premises virtualization technologies, including: VMs, virtual networking, and virtual hard disks.

- Understanding of network configuration, including TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies.
- Understanding of Active Directory concepts, including domains, forests, domain controllers, replication, Kerberos protocol, and Lightweight Directory Access Protocol (LDAP).

- Understanding of resilience and disaster recovery, including backup and restore operations.
- Understanding of Applications development and APIs.
- Understanding of Databases, both SQL such as MS SQL, MySQL or Postgres, and Non-SQL databases like MongoDB.
- Understanding of decoupling Applications and services, for example, Queues, tables, Cache.
- Understanding of Security concepts to protect your environment, like encryption at rest, encryption in transit, SSL, TLS.

Objectives

After completing this course, you will be able to:

Refer solution for automating compute management

- Recommend the appropriate compute technologies, including virtual machines, and App Services
- Recommend the appropriate AKS and ACI and the configurations
- Solutions for network addressing and name resolution
- Solutions for network security including private endpoints, firewalls, and gateways
- Recommendations for network connectivity to the Internet, on-premises networks, and other VNets
- Recommendations for load balancing and traffic routing
- Assess on-premises servers and applications for migration
- Suggest solutions for migrating applications and VMs
- Determine migration scope, including redundant, related, trivial, and outdated data
- Recommend hierarchy of Management Groups and Subscriptions.
- Configure custom RBAC Role definitions and assignments
- Organize Policies with Initiatives
- Manage Tag Governance with Azure Policy
- Recommend Database Service Tier Sizing and a Solution for Encrypting Data at Rest, Transmission, and In Use
- Design for Azure Blob Storage access tiers and Monitor Azure resources with Azure Monitor
- Implement Azure Synapse Analytics
- Describe how data flows using Azure Data Factory
- Recommend solutions for Azure hybrid and on-premises workloads that meets recovery objectives, a solution for site recovery capacity and storage types and methodology for data archiving
- Recommend a solutions for autoscaling and solutions for geo-redundancy of workloads
- Identify storage types for high availability
- Optimize with Azure Cost Management
- Recommend deployment solutions using ARM templates, Logic Apps, or Azure Functions, solution for monitoring automation and a hosting structure for API management
- Understand Key Vault authentication and authorization, Azure Key Vault availability and redundancy and Understand how Blueprints differ from Resource Manager Templates and Azure Policy

---

About Capgemini Academy

Capgemini Academy's professionals offer what people in IT need. Our professionals have a keen eye for motivation, talent and are aware of specific contexts and circumstances. They move people to move. Programmes and courses that originate from daily experience of our both didactical and substantively strong trainers, light a fire within the individual IT professionals.
Real life stories of our professionals' experience that tell how to solve problems and work with the people around it, do the rest.

An organization, like ours, helps people and their organizations day by day to get the best out of themselves and each other. We prepare them to defy tomorrow's challenges. We stimulate learning and curiosity. In order for individual IT professionals and their employers, to build better, longer and more intensive relationships. For mutual benefit.

Capgemini Academy. We transform IT professionals
academy.capgemini.nl

IN/3A-018.18