



Kursus 4 dage Nr. 90324 A	DKK 16.999 ekskl. moms
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Azure Architect Design [AZ-304]

Få de nødvendige færdigheder for at kunne omsætte virksomhedens krav til sikre, skalerbare og stabile løsninger i Azure. På kurset gennemgår vi de overvejelser du skal gøre dig i designfasen omkring logging, omkostningsanalyse, godkendelser, governance, sikkerhed, lagring, tilgængelighed og migrering som alle påvirker den samlede løsning. Kurset er desuden forberedende til eksamen AZ-304 Azure Architect Design.

Azure Solution Architect

Som Azure Solution Architect bør du have et bredt kendskab til it-drift, herunder netværk, virtualisering, identitet, sikkerhed, forretningskontinuitet, it-katastrofeberedskab, dataplatform, budgettering og governance. Skal du certificeres skal du have færdigheder på ekspertniveau i Azure-administration og have erfaring med Azure-udviklingsprocesser samt DevOps processer.

Se også kurset [Azure Architect Technologies \[AZ-303\]](#)

Udbytte

- Optimering af omkostninger med Azure Cost Management
- Lær om monitorering af Azure resources med Azure Monitor
- Forståelse for Azure Active Directory Seamless Single Sign-On (SSO) og anbefaling af metoder til godkendelse af hybride identiteter
- Brug af Azure Policy
- Forståelse for Key Vault godkendelser og tilladelser



- Lær om Design og Azure Site Recovery løsninger
- Læs om autoscalling løsninger
- Lær om containers, AKS og ACI
- Migrering af databaser, applikationer og virtuelle maskiner
- Udrulning ved hjælp af ARM templates, Logic Apps eller Azure Functions
- Lær om network security herunder private endpoints, firewalls og gateways

Forudsætninger

Som Azure Solution Architects skal du have forståelse for cloud teknologier og erfaring med operativsystemer, virtualisering og netværk. Du forventes at have en grundlæggende viden svarende til kurset [Azure Fundamentals](#) samt kendskab til:

- virtualisering on-premise herunder VMs, virtuelle netværk og virtuelle hard disks
- konfiguration af netværk herunder TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls eller encryption teknologier
- Active Directory herunder domains, forests, domain controllers, replication, Kerberos protocol og Lightweight Directory Access Protocol (LDAP)
- forståelse for resilience og disaster recovery herunder backup og restore operations
- Derudover er det en fordel at have kendskab til PowerShell og .NET udvikling.

Deltagerprofil

Kurset er for dig som har arkitektrollen og skal i gang med, eller allerede arbejder med at designe løsninger i Azure.

Indhold

Module 1: 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.
 - Recommend Solutions for Cost Management
 - Recommended Viewpoints for Minimizing Costs

Module 2: 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.
 - Azure Monitoring Services
 - Azure Monitor

Module 3: Design Authentication

- In this module, you will learn to implement Conditional Access and Azure Multi-Factor Authentication and also be able to recommend an Authentication Methodology for Hybrid Identity.
 - Recommend a Solution for Multi-Factor Authentication
 - Recommend a Solution for Single-Sign On (SSO)
 - Five Steps for Securing Identity Infrastructure
 - Recommend a Solution for a Hybrid Identity
 - Recommend a Solution for B2B Integration

Module 4: Design Authorization

- In this module, you will learn how to provide Identities to services and understand the hierarchy of Management Groups and Subscriptions.
 - Infrastructure Protection
 - Recommend a Hierarchical Structure for Management Groups, Subscriptions and Resource 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.
 - Recommend a Solution for using Azure Policy
 - Recommend a Solution for using Azure Blueprint

Module 6: Design Security for Applications

- In this module, you will understand Azure Key Vault availability and redundancy, managed Identities for Azure resources. Also, learn about system-assigned Managed Identity and Azure VMs.
 - Recommend a Solution using KeyVault
 - Recommend a Solution using Azure AD Managed Identities

Module 7: 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.
 - 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 8: Design Data Integration

- In this module, you will learn about data flows using Azure Data Factory and Azure Synapse Analytics architecture.
 - Recommend a Data Flow
 - Recommend a Solution for Data Integration

Module 9: 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.
 - Understanding Storage Tiers
 - Recommend a Storage Access Solution
 - Recommend Storage Management Tools

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

Module 12: 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.
 - Recommend a Solution for Compute Provisioning
 - Determine Appropriate Compute Technologies
 - Recommend a Solution for Containers
 - Recommend a Solution for Automating Compute Management

Module 13: Design a Network Solution

- In this module, you will learn about solutions for network addressing and name resolution, network provisioning, and network security.
 - 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 Internet Connectivity and On-Premises Networks
 - Recommend a Solution for Automating Network Management
 - Recommend a Solution for Load Balancing and Traffic Routing

Module 14: 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.
 - Recommend a Microservices Architecture
 - Recommend an Orchestration Solution for Deployment of Applications
 - Recommend a Solution for API Integration

Module 15: Design Migrations

- In this module, you will learn about recommend a solution for migrating applications and VMs and a solution for migration of databases.
 - Assess and On-Premises Servers and Applications for Migration
 - Recommend a Solution for Migrating Applications and VMs
 - Recommend a Solution for Migration of Databases

Certificering

Dette kursus er rettet mod eksamen [AZ-304 Azure Architect Design](#), som sammen med eksamen [AZ-303 Azure Architect Technologies](#) leder hen til certificeringen **Microsoft Certified Azure Solution Architect, Expert**. Eksamen bestilles og betales særskilt.

- Candidates for this exam are Azure Solution Architects who advise stakeholders and translates business requirements into secure, scalable, and reliable solutions.
- Candidates should have advanced experience and knowledge across various aspects of IT operations, including networking, virtualization, identity, security, business continuity, disaster recovery, data management, budgeting, and governance. This role requires managing how decisions in each area affects an overall solution.
- Candidates must have expert-level skills in in Azure administration and have experience with Azure development processes and DevOps processes.

[Læs mere om IT-certificering.](#)

Underviser

Undervisningen varetages af en anden erfaren underviser fra Teknologisk Instituts netværk bestående af branchens dygtigste undervisere.

Har du faglige spørgsmål så kontakt



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