Microsoft Azure Architect Design (AZ-304)

Modality: On Demand

Duration: 20 Hours

About this Course:

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.

Course Objectives:

After completing this course, students will be able to:

- Recommend a solution for Conditional Access, including multi-factor authentication
- Recommend a solution for a hybrid identity including Azure AD Connect and Azure AD Connect
- Recommend a solution for using Azure Policy
- Recommend a solution that includes KeyVault
- Recommend a solution that includes Azure AD Managed Identities
- Recommend a storage access solution
- Design and Azure Site Recovery solution
- Recommend a solution for autoscaling
- Recommend a solution for containers
- Recommend a solution for network security
- Recommend a solution for migrating applications and VMs
- Recommend a solution for migration of databases

Audience:

- 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.

Prerequisites:

Successful Azure Solution Architects start this role with experience on operating systems, virtualization, cloud infrastructure, storage structures, and networking.

- 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.

Course Outline:

- Course Introduction
- Module 1: Design for Cost Optimization
- Module 2: Design a Solution for Logging and Monitoring
- Module 3: Designing Authentication
- Module 4: Design Governance
- Module 5: Design Security for Applications
- Module 6: Design a Solution for Databases
- Module 7: Design Data Integration
- Module 8: Design Storage Accounts
- Module 9: Design for BC/DR
- Module 10: Design for High Availability
- Module 11: Design a Compute Solution
- Module 12: Design a Network Solution
- Module 13: Design an Application Architecture
- Course Conclusion