

Training Contents for Microsoft Azure Solutions Architect Expert

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Microsoft Cybersecurity Architect | Microsoft Azure Solutions Architect | Microsoft 365 Administrator Expert |
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Microsoft Instructor (Part-Time)

1. Concepts of Cloud Computing & Azure Resource Manager

✓ Introduction to Cloud Computing

- Cloud Computing Overview
- Cloud Computing Models - IaaS vs PaaS vs SaaS
- Cloud Deployment Models – Public, Private, and Hybrid
- Overview of Azure Subscription
- Azure Portal overview

✓ Managing Azure Resources

- Management Groups
- Azure Resource Manager
- Azure Portal and PowerShell
- Azure Resource Manager Policies
- Azure Policy Definition Structure
- Resource Management Locks
- Organizing Azure Resources

2. Design Networking, Connectivity & Integration

✓ Azure Networking Services

- Virtual Network (VNet), Subnets, & Network Security Groups (NSGs)
- Private Link, ExpressRoute & VPN Gateway
- Application Gateway & Azure Front Door

✓ Designing for Hybrid Solutions

- Azure Arc for hybrid environments
- BGP, VNet Peering, & Cross-region networking
- Load Balancing & Traffic Management

✓ Designing Secure API Integrations

- Azure API Management
- Service Bus, Event Grid, & Event Hub
- Logic Apps & Function Apps

3. Design for Data Storage Solutions

✓ Choosing Storage & Database Solutions

- Azure SQL Database, MySQL
- Azure Storage (Blob, File, Table, Queue)

- Data replication & Geo-distribution strategies

✓ Designing Data Security

- Encryption at Rest & In Transit
- Data Loss Prevention (DLP) & Backup Strategies
- Key Vault & Managed Identities

✓ Data Integration & Migration

- Azure Data Factory
- ETL with Azure Synapse Analytics
- Data migration strategies

4. Design Compute Solutions

✓ Choosing Compute Options

- Azure Virtual Machines, App Services, AKS
- Serverless computing (Azure Functions)
- Azure Batch & HPC Solutions

✓ Designing Virtualization & Containerization

- Azure Kubernetes Service (AKS)
- Azure Container Apps & Docker Integration

✓ Designing Security for Compute Workloads

- Just-in-Time (JIT) Access & Bastion Host
- Identity & Access Management for Compute
- Azure Security Best Practices

5. Design Governance & Compliance Solutions

✓ Designing for Cost Optimization

- Azure Pricing Calculator & TCO
- Cost management best practices
- Azure Reservations & Spot VMs

✓ Designing Identity & Access Management

- Azure Active Directory (AAD)
- Identity Protection & Conditional Access

- Privileged Identity Management (PIM)

✓ Designing Governance Strategies

- Azure Policy & Blueprints
- Role-Based Access Control (RBAC)
- Subscription & Management Groups

✓ Security, Compliance & Risk Management

- Microsoft Defender for Cloud
- Security Center & Secure Score
- Compliance & Regulatory Requirements

6. Design Business Continuity & Disaster Recovery (BCDR)

✓ High Availability & Disaster Recovery (HA/DR)

- Azure Backup & Site Recovery (ASR)
- Geo-redundant Storage (GRS) & Read Replicas
- Failover & Load Balancing

✓ Designing Monitoring & Automation Solutions

- Azure Monitor & Log Analytics
- Application Insights & Performance Tuning
- Auto-scaling & Automation using Azure Functions

✓ Designing Solutions for Scalability & Performance

- Compute options (VMs, Containers, Kubernetes)
- Caching Strategies (Azure Redis Cache, CDN)
- API Throttling & Rate Limiting