Course duration

- 4 days

Course Benefits

- Recommend solutions to minimize costs
- 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

Microsoft Certified Partner

Webucator is a Microsoft Certified Partner for Learning Solutions (CPLS). This class uses official Microsoft courseware and will be delivered by a Microsoft Certified Trainer (MCT).

Course Outline

1. Design for Cost Optimization
    1. Recommend Solutions for Cost Management
    2. Recommended Viewpoints for Minimizing Costs
2. Design a Solution for Logging and Monitoring
    1. Azure Monitoring Services
    2. Azure Monitor
3. Design Authentication
    1. Recommend a Solution for Multi-Factor Authentication
    2. Recommend a Solution for Single-Sign On (SSO)
    3. Five Steps for Securing Identity Infrastructure
    4. Recommend a Solution for a Hybrid Identity
    5. Recommend a Solution for B2B Integration

4. Design Authorization
    1. Infrastructure Protection
    2. Recommend a Hierarchical Structure for Management Groups, Subscriptions and Resource Groups
5. Design Governance
    1. Recommend a Solution for using Azure Policy
    2. Recommend a Solution for using Azure Blueprint
6. Design Security for Applications
    1. Recommend a Solution using KeyVault
    2. Recommend a Solution using Azure AD Managed Identities
7. Design a Solution for Databases
    1. Select an Appropriate Data Platform Based on Requirements
    2. Overview of Azure Data Storage
    3. Recommend Database Service Tier Sizing
    4. Dynamically Scale Azure SQL Database and Azure SQL Managed Instances
    5. Recommend a Solution for Encrypting Data at Rest, Transmission, and In Use
8. Design Data Integration
    1. Recommend a Data Flow
    2. Recommend a Solution for Data Integration
9. Select an Appropriate Storage Account
    1. Understanding Storage Tiers
    2. Recommend a Storage Access Solution
    3. Recommend Storage Management Tools
10. Design a Solution for Backup and Recovery
    1. Recommend a Recovery Solution for Hybrid and On-Premises Workloads
    2. Design and Azure Site Recovery Solution
    3. Recommend a Solution for Recovery in Different Regions
    4. Recommend a Solution for Azure Backup Management
    5. Design a Solution for Data Archiving and Retention
11. Design for High Availability
    1. Recommend a Solution for Application and Workload Redundancy
    2. Recommend a Solution for Autoscaling
    3. Identify Resources that Require High Availability
    4. Identify Storage Tpes for High Availability
    5. Recommend a Solution for Geo-Redundancy of Workloads
12. Design a Compute Solution
    1. Recommend a Solution for Compute Provisioning
    2. Determine Appropriate Compute Technologies
    3. Recommend a Solution for Containers
    4. Recommend a Solution for Automating Compute Management
13. Design a Network Solution
    1. Recommend a Solution for Network Addressing and Name Resolution
    2. Recommend a Solution for Network Provisioning
    3. Recommend a Solution for Network Security
    4. Recommend a Solution for iInternete Connectivity and On-Premises Networks,
    5. Recommend a Solution for Automating Network Management
    6. Recommend a Solution for Load Balancing and Rraffic Routing

14. Design an Application Architecture
    1. Recommend a Microservices Architecture
    2. Recommend an Orchestration Solution for Deployment of Applications
    3. Recommend a Solution for API Integration
15. Design Migrations
    1. Assess and On-Premises Servers and Applications for Migration
    2. Recommend a Solution for Migrating Applications and VMs
    3. Recommend a Solution for Migration of Databases

Class Materials

Each student will receive a comprehensive set of materials, including course notes and all the class examples.

Class Prerequisites

Experience in the following *is required* for this Azure class:

- 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.