

# **AZ-204: Developing Solutions for Microsoft Azure**

## Content

### **Module 1: Creating Azure App Service Web Apps**

- **Lessons:**
    - Azure App Service core concepts
    - Creating an Azure App Service Web App
    - Configuring and Monitoring App Service apps
    - Scaling App Service apps
    - Azure App Service staging environments
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### **Module 2: Implement Azure Functions**

- **Lessons:**
    - Azure Functions overview
    - Developing Azure Functions
    - Implement Durable Functions
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### **Module 3: Develop Solutions that Use Blob Storage**

- **Lessons:**
    - Azure Blob storage core concepts
    - Managing the Azure Blob storage lifecycle
    - Working with Azure Blob storage
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### **Module 4: Develop Solutions that Use Cosmos DB Storage**

- **Lessons:**
    - Azure Cosmos DB overview
    - Azure Cosmos DB data structure
    - Working with Azure Cosmos DB resources and data
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### **Module 5: Implement IaaS Solutions**

- **Lessons:**
  - Provisioning VMs in Azure
  - Create and deploy ARM templates
  - Create container images for solutions
  - Publish a container image to Azure Container Registry

- Create and run container images in Azure Container Instances
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## **Module 6: Implement User Authentication and Authorization**

- **Lessons:**
    - Microsoft Identity Platform v2.0
    - Authentication using the Microsoft Authentication Library
    - Using Microsoft Graph
    - Authorizing data operations in Azure Storage
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## **Module 7: Implement Secure Cloud Solutions**

- **Lessons:**
    - Manage keys, secrets, and certificates by using the KeyVault API
    - Implement Managed Identities for Azure resources
    - Secure app configuration data by using Azure App Configuration
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## **Module 8: Implement API Management**

- **Lessons:**
    - API Management overview
    - Defining policies for APIs
    - Securing your APIs
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## **Module 9: Develop App Service Logic Apps**

- **Lessons:**
    - Azure Logic Apps overview
    - Creating custom connectors for Logic Apps
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## **Module 10: Develop Event-Based Solutions**

- **Lessons:**
    - Implement solutions that use Azure Event Grid
    - Implement solutions that use Azure Event Hubs
    - Implement solutions that use Azure Notification Hubs
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## **Module 11: Develop Message-Based Solutions**

- **Lessons:**
    - Implement solutions that use Azure Service Bus
    - Implement solutions that use Azure Queue Storage queues
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## **Module 12: Monitor and Optimize Azure Solutions**

- **Lessons:**
    - Overview of monitoring in Azure
    - Instrument an app for monitoring
    - Analyzing and troubleshooting apps
    - Implement code that handles transient faults
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## **Module 13: Integrate Caching and Content Delivery within Solutions**

- **Lessons:**
  - Develop for Azure Cache for Redis
  - Develop for storage on CDNs