

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

### **Course Outline**

#### **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

#### **Module 2: Implement Azure Functions**

##### **Lessons:**

- Azure Functions overview
- Developing Azure Functions
- Implement Durable Functions

#### **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

#### **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

#### **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

#### **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

#### **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

## **Module 8: Implement API Management**

### **Lessons:**

- API Management overview
- Defining policies for APIs
- Securing your APIs

## **Module 9: Develop App Service Logic Apps**

### **Lessons:**

- Azure Logic Apps overview
- Creating custom connectors for Logic Apps

## **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

## **Module 11: Develop Message-Based Solutions**

### **Lessons:**

- Implement solutions that use Azure Service Bus
- Implement solutions that use Azure Queue Storage queues

## **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

## **Module 13: Integrate Caching and Content Delivery within Solutions**

### **Lessons:**

- Develop for Azure Cache for Redis
- Develop for storage on CDNs