

## AZ-300T06-A: Developing for the Cloud

### OBJECTIVE

Learn how to configure a message-based integration architecture, develop for asynchronous processing, create apps for autoscaling, and better understand Azure Cognitive Services solutions.

### COURSE TOPICS

#### Module 1: Developing Long-Running Tasks and Distributed Transactions

Topics for this module include: implementing large-scale, parallel, and high-performance apps using batches; HPC using Microsoft Azure Virtual Machines; implementing resilient apps by using queues; as well as implementing code to address application events by using webhooks. Implementing a webhook gives an external resource a URL for an application; the external resource then issues an HTTP request to that URL whenever a change is made that requires the application to take an action.

#### Module 2: Configuring a Message-Based Integration Architecture

##### Lessons

- Configure an app or service to send emails
- Configure an event publish and subscribe model
- Configure the Azure Relay service
- Configure apps and services with Microsoft Graph

After completing this module, students will be able to:

- Configure a message-based integration architecture

#### Module 3: Developing for Asynchronous Processing

##### Lessons

- Implement parallelism, multithreading, and processing
- Implement Azure Functions and Azure Logic Apps
- Implement interfaces for storage or data access
- Implement appropriate asynchronous computing models
- Implement autoscaling rules and patterns

After completing this module, students will be able to:

- Understand how to develop for Asynchronous Processing

## Module 4: Developing for Autoscaling

### Lessons

- Implementing autoscaling rules and patterns
- Implementing code that addresses singleton application instances
- Implementing code that addresses a transient state

After completing this module, students will be able to:

- Begin creating apps for Autoscaling

## Module 5: Developing Azure Cognitive Services Solutions

### Lessons

- Developing Solutions using Computer Vision
- Developing solutions using Bing Web Search
- Developing solutions using Custom Speech Service
- Developing solutions using QnA Maker

After completing this module, students will be able to:

- Understand Azure Cognitive Services Solutions

## Module 6: Develop for Azure Storage

### Lessons

- Develop Solutions that use Azure Cosmos DB Storage
- Develop Solutions that use a Relational Database
- Modeling a Database by using Entity Framework Core
- Develop Solutions that use Microsoft Azure Blob Storage
- Manipulating Blob Container Properties in .NET

After completing this module, students will be able to:

- Understand Azure Storage services such as blobs and Cosmos DB

## TRAINING APPROACH

This course includes lectures, course notes, exercises and hands-on practice.

## COURSE DURATION

Bundle Course in 3 days

Time: 9:00am to 6:00pm

Lunch Time: 1:00pm to 2:00pm

## CERTIFICATION COMPLETION

A certificate of completion is provided for all trainees attending the course.