

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

## About this course

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 Outline

### 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:

- How 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

