

**Azure for Developers**

**Course Number:** AZR-140  
**Duration:** 3 days

**Overview**

What does “move your application to the cloud” mean? What opportunities can you take advantage of to create scalable, reliable, and reliable applications using cloud-based services? How do you ensure that your application is secure and implement a “zero trust” solution for all your application’s components? This Azure for Developers training course answers these questions and more. Attendees learn how to design a cloud-based, serverless application while leveraging existing code resources and successfully take their application to the cloud.

**Prerequisites**

All students must have C# knowledge and some web development experience. No experience with Azure is required.

**Materials**

All Azure training students receive comprehensive courseware.

**Software Needed on Each Student PC**

Attendees will not need to install any software on their computer for this class. The class will be conducted in a remote environment that Accelebrate will provide; students will only need a local computer with a web browser and a stable Internet connection. Any recent version of Microsoft Edge, Mozilla Firefox, or Google Chrome will be fine.

**Objectives**

* Set up the Azure environment and an Azure SQL database
* Deploy a single-tier Web application
* Deploy two-tier Web applications that include web services
* Secure multi-tier applications
* Implement and secure a microservices architecture

**Outline**

* Introduction
* Azure SQL
  + Setting up an Azure SQL database
  + Accessing Azure SQL
  + Controlling database access from an App Service
* Hosting the Application
  + Creating an App Service
  + Registering Your Application
  + Defining the storage required for a Web App
  + Deploying a Web App
  + Protecting your Web App with Web Application Gateway
* Creating Services
  + Adding Web Services to an App Service
  + Defining Web Services using Azure functions
  + Integrating Web Services into App Services
  + Distributing demand with Traffic Manager
* Integrating Web Services
  + Defining API Management (APIM)
  + Validating requests
  + Controlling response
  + Defining the “whole application” configuration with App Settings
* Securing the Application
  + Authenticating users and services
  + Assigning permissions to services
  + Controlling access
  + Keeping secrets with KeyVault
* Architecting Microservices
  + Creating loosely-coupled applications with Storage Queues
  + Building extendable applications with Service Bus
  + Linking services with event-driven applications
  + Authorizing microservices
* Conclusion