

**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 computers 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 work well.

**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