

# Developing Windows Azure and Web Services

20487B



**Delivery Type:** Classroom

**Duration:** 5 days

## Overview:

In this course, students will learn how to design and develop services that access local and remote data from various data sources. Students will also learn how to develop and deploy services to hybrid environments, including on-premises servers and Windows Azure. This course helps people prepare for exam 70-487.

## Audience Profile:

This course is intended for both novice and experienced .NET developers who have a minimum of six months programming experience, and want to learn how to develop services and deploy them to hybrid environments.

## Course Completion:

After completing this course, students will be able to:

- ✓ Query and manipulate data with Entity Framework
- ✓ Use ASP.NET Web API to create HTTP-based services and consume them from .NET and non-.NET clients
- ✓ Extend ASP.NET Web API services using message handlers, model binders, action filters, and media type formatters
- ✓ Create SOAP-based services with the Windows Communication Foundation (WCF) and consume them from .NET clients
- ✓ Apply design principles to service contracts and extend WCF services using custom runtime components and behaviors

- ✓ Secure WCF services using transport and message security
- ✓ Use Windows Azure Service Bus for relayed messaging and brokered messaging using queues and topics
- ✓ Host services on on-premises servers, and on various Windows Azure environments, such as Web Roles, Worker Roles, and Web Sites
- ✓ Deploy services to both on-premises servers and Windows Azure
- ✓ Store and access data in Windows Azure Storage, and configure storage access rights
- ✓ Monitor and log services, both on-premises and in Windows Azure
- ✓ Implement federated authentication by using ACS with ASP.NET Web API services
- ✓ Create scalable, load-balanced services

**Prerequisites:**

Before attending this course, students must have:

- ✓ Experience with C# programming, and concepts such as Lambda expressions, LINQ, and anonymous types.
- ✓ Understanding the concepts of n-tier applications.
- ✓ Experience with querying and manipulating data with ADO.NET.
- ✓ Knowledge of XML data structures.