

(20532C) – Developing Microsoft Azure Solutions

OBJECTIVE

This course is intended for students who have experience building ASP.NET and C# applications. Students will also have experience with the Microsoft Azure platform and a basic understanding of the services offered. This course offers students the opportunity to take an existing ASP.NET MVC application and expand its functionality as part of moving it to Azure. This course focuses on the considerations necessary when building a highly available solution in the cloud. This course also prepares the students for the 70-532: Developing Microsoft Azure Solutions certification exam.

COURSE TOPICS

Module 1: Overview of the Microsoft Azure Platform

- Azure Services
- Azure Portals

Module 2: Building Application Infrastructure in Azure

- Constructing Azure Virtual Machines
- Azure Virtual Machine Workloads
- Migrating Azure Virtual Machine Instances
- Highly Available Azure Virtual Machines
- Virtual Machine Configuration Management
- Customizing Azure Virtual Machine Networking

Module 3: Hosting Web Applications on the Azure Platform

- Azure Web Apps
- Hosting Web Applications in Azure
- Configuring an Azure Web App
- Publishing an Azure Web App

Module 4: Storing SQL Data in Azure

- Storing SQL Data in Azure
- Managing SQL Databases in Azure
- Azure SQL Database Tools
- Securing and Recovering an Azure SQL Database Instance

Module 5: Designing Cloud Applications for Resiliency

- Application Design Practices for Highly Available Applications
- Application Analytics
- Building High Performance Applications by Using ASP.NET

- Common Cloud Application Patterns
- Caching Application Data

Module 6: Storing Tabular Data in Azure

- Azure Storage Overview
- Azure Storage Tables Overview
- Table Entity Transactions

Module 7: Storing and Consuming Files from Azure Storage

- Storage Blobs
- Controlling Access to Storage Blobs and Containers
- Configuring Azure Storage Accounts
- Azure Files

Module 8: Designing a Communication Strategy by Using Queues and Service Bus

- Azure Storage Queues
- Azure Service Bus
- Azure Service Bus Queues
- Azure Service Bus Relay
- Azure Service Bus Notification Hubs

Module 9: Automating Integration with Azure Resources

- Azure SDK Client Libraries
- Scripting Azure Service Management by Using Windows PowerShell
- Azure REST Interface
- Azure Resource Manager

Module 10: Securing Azure Web Applications

- Azure Active Directory
- Azure AD Directories
- Azure AD Multi-Factor Authentication

PREREQUISITES

In addition to their professional experience, students must have experience working with the Azure platform. They will also have a general understanding of C# concepts for the lab scenario. Candidates experience can include:

- Compare the services available in the Azure platform
- Configure and deploy web applications
- Creating Azure Web Apps from the gallery
- Deploying and monitoring Azure Web Apps
- Creating and configuring Azure Virtual Machines

- Create and manage a storage account
- Manage blobs and containers in a storage account
- Create, configure, and connect to a SQL Databases instance
- Identify the implications of importing a SQL standalone database
- Manage users, groups, and subscriptions in an Azure Active Directory instance
- Create a virtual network
- Implement a point-to-site network

TRAINING APPROACH

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

COURSE DURATION

24 Hours (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