



Azure

AZ-200: Azure Developer Core Solutions Training

\$2,595.00

- 4 Days
- Official Microsoft Course
- Exam AZ-200
- New Role-Based Certification Training

Upcoming Dates

Course Description

Day 1: Select the Appropriate Azure Technology Development Solution (AZ-200T01-A)

The coursework covers Azure architecture, design and connectivity patterns, and choosing the right storage solution for your development needs.

Day 2: Develop for Azure Storage (AZ-200T02-A)

The coursework covers developing solutions leveraging Azure Storage options including: Cosmos DB, Azure Storage tables, file storage, Blob, relational databases, and caching and content delivery networks.

Day 3: Develop Azure Platform as a Service Solutions (AZ-200T03-A)

The coursework covers solutions for: creating App Service Web Apps; notification and offline sync for mobile apps; Service Fabric; serverless Azure Functions; managing bulk operations through the Batch Service API; Azure Kubernetes Service; and Azure Media Services.

Day 4: Implement Security in Azure Development Solutions (AZ-200T04-A)

The coursework covers how authentication and authorization work in Azure, and how to implement secure data solutions with: encryption; Azure Key Vault; and SSL and TLS communications.

Course Outline

Day 1: Select the Appropriate Azure Technology Development Solution (AZ-200T01-A)

Module 1: Select an appropriate compute solution

- Take advantage of appropriate design and connectivity patterns

After completing this module, students will be able to:

- Learn common Azure application design and connectivity patterns

Module 2: Design for hybrid technologiesLessons

- Virtual networking
- Hybrid networking

After completing this module, students will be able to:

- Measuring and planning throughput, and data access structure

Module 3: Select an appropriate storage solutionLessons

- Address durability of data
- Caching
- Measure and plan throughput and structure of data access

After completing this module, students will be able to:

- Learn about Azure networking topologies

Day 2: Develop for Azure Storage (AZ-200T02-A)

Module 1: Develop solutions that use Azure Storage tablesLessons

- Connect to Azure Storage
- Design and Implement Storage tables
- Query a table by using code

After completing this module, students will be able to:

- Connect to storage in Azure
- Design and implement policies to Tables

Module 2: Develop solutions that use Azure Cosmos DB storage Azure Cosmos DBLessons

- Choose the appropriate API for Cosmos DB storage
- Manage containers and items in Cosmos DB storage
- Create, read, update, and delete documents in Azure Cosmos DB by using code

Module 3: Develop solutions that use file storageLessons

- Implement file shares for an Azure storage account
- Migrating content to and between file shares

Module 4: Develop solutions that use a relational databaseLessons

- Create, read, update, and delete database tables by using code
- Implement SQL Dynamic Data Masking

After completing this module, students will be able to:

- Create, read, update, and delete tables by using code

Module 5: Develop solutions that use Microsoft Azure Blob storageLessons

- Create a Shared Access Signature for a blob
- Asynchronously move items in Blob storage between containers
- Set Blob storage container properties in metadata

After completing this module, students will be able to:

- Develop solutions that use blob storage

Module 6: Develop for caching and content delivery solutionsLessons

- Azure Redis Cache
- Develop for storage on CDNs

After completing this module, students will be able to:

- Develop for Azure Redis cache and content delivery networks

Day 3: Deploying and Managing Virtual Machines (AZ-100T03-A)

Module 1: Creating App Service Web AppsLessons

- Introduction to Web Apps
- Using shell commands to create App Service Web Apps
- Creating background tasks using WebJobs in Azure App Service
- Using Swagger to document an API

After completing this module, students will be able to:

- Create an Azure app service web app by using Azure CLI, Powershell, and other tools
- Create documentation for the API by using open source and other tools

Module 2: Creating mobile appsLessons

- Getting started with mobile apps in App Service
- Enabling push notifications for your app
- Enabling offline sync for your app

After completing this module, students will be able to:

- Add push notifications and enable offline sync for mobile apps

Module 3: Creating an app service Logic AppLessons

- Overview of Azure Logic Apps
- Creating a Logic App
- Creating custom connectors for Logic Apps
- Creating a custom template for a Logic App

Module 4: Creating an app or service that runs on Service FabricLessons

- Understanding Azure Service Fabric
- Creating a Reliable Service
- Creating a Reliable Actors app
- Working with Reliable Collections

After completing this module, students will be able to:

- Develop stateful and stateless apps on Service Fabric

Module 5: Creating Azure FunctionsLessons

- Azure Functions overview
- Develop Azure Functions using Visual Studio
- Triggers and bindings

After completing this module, students will be able to:

- Create Azure functions including bindings and triggers

Module 6: Scheduling bulk operationsLessons

- Azure Batch overview
- Running Batch jobs
- Using the .NET Batch Management client library

After completing this module, students will be able to:

- Define and run scheduled bulk operations

Module 7: Create solutions that use Azure Kubernetes ServiceLessons

- Creating an Azure Kubernetes Service cluster
- Azure Container Registry
- Azure Container Instances

After completing this module, students will be able to:

- Create an Azure Container Service (ACS/AKS) cluster using Azure CLI and Azure Portal

Module 8: Developing apps for Azure Media ServicesLessons

- Introduction to Azure Media Services
- Azure Media Services v3 concepts
- Upload, encode, and stream with .NET
- Analyze your video with .NET

After completing this module, students will be able to:

- Develop media solutions that use AI services

Day 4: Implement Security in Azure Development Solutions (AZ-200T04-A)

Module 1: Implementing authenticationLessons

- Implement authentication in applications
- Implement multi-factor authentication

After completing this module, students will be able to:

- Learn about the different authentication options, including multi-factor, available in Azure and how they operate

Module 2: Implementing access controlLessons

- Claims-based authorization
- Role-based access control (RBAC) authorization

After completing this module, students will be able to:

- Learn about implementing access control in your solution including claims- and role-based authorization

Module 3: Implementing secure data solutionsLessons

- Encryption options
- End-to-end encryption
- Implement Azure confidential computing
- Manage cryptographic keys in Azure Key Vault

After completing this module, students will be able to:

- Implement secure data solutions by using encryption, Azure confidential computing, and SSL/TLS communications

Audience

These courses are for experienced programmers who want to develop and host solutions in Azure. Learners should have some experience with Azure and must be able to program in at least one Azure-supported language. These course focus on C#, Node.js, Azure CLI, Azure PowerShell, and JavaScript.

Prerequisites

What You Will Learn

Day 1: Select the Appropriate Azure Technology Development Solution (AZ-200T01-A)

- Learn common Azure application design and connectivity patterns
- Measuring and planning throughput, and data access structure
- Learn about Azure networking topologies

Day 2: Develop for Azure Storage (AZ-200T02-A)

- Connect to storage in Azure
- Design and implement policies to Tables
- Create, read, update, and delete tables by using code
- Develop for Azure Redis cache and content delivery networks
- Develop solutions that use blob storage

Day 3: Develop Azure Platform as a Service Solutions (AZ-200T03-A)

- Create an Azure app service web app by using Azure CLI, Powershell, and other tools
- Create documentation for the API by using open source and other tools
- Add push notifications and enable offline sync for mobile apps
- Develop stateful and stateless apps on Service Fabric
- Create Azure functions including bindings and triggers
- Define and run scheduled bulk operations
- Create an Azure Container Service (ACS/AKS) cluster using Azure CLI and Azure Portal
- Develop media solutions that use AI services

Day 4: Implement Security in Azure Development Solutions (AZ-200T04-A)

- Learn about the different authentication options, including multi-factor, available in Azure and how they operate
- Learn about implementing access control in your solution including claims- and role-based authorization
- Implement secure data solutions by using encryption, Azure confidential computing, and SSL/TLS communications
- Manage cryptographic keys in Azure Key Vault