

Microservices in the Azure Cloud

Duration: 3 days

Course Description: Microservices in the Azure Cloud is a course designed to teach you how to design, develop, deploy, and manage microservices-based applications on the Microsoft Azure Cloud platform.

The course starts by introducing you to the concepts of microservices architecture and its benefits over traditional monolithic architectures. You will learn how to design microservices-based applications that are scalable, resilient, and fault-tolerant using Azure services such as Azure Kubernetes Service (AKS), Azure Service Bus, Azure Functions, and Azure API Management.

You will also learn how to develop microservices-based applications using popular programming languages such as .NET Core, and how to deploy them on Azure using Docker containers.

In addition to designing and developing microservices-based applications, the course also covers best practices for managing and monitoring microservices-based applications on Azure, including strategies for logging, monitoring, and troubleshooting.

Upon completing the course, you will have a solid understanding of microservices architecture and its benefits, as well as hands-on experience in designing, developing, deploying, and managing microservices-based applications on Azure.

Course Outline:

- Your first Microservice
- Microservices and Source Control
- Publishing NuGet Packages to GitHub
- Dockerizing your microservices
- Getting Started with Microsoft Azure
- Using Azure Cosmos DB
- Using Azure Service Bus
- Using the Azure Container Registry
- Deploying microservices to Azure Kubernetes Service
- Reporting the microservices health
- Storing Secrets in Azure Key Vault
- Adding the API Gateway
- Enabling HTTPS and TLS Termination
- Running the system in Production