

# DP 3020- Develop Data-Driven Applications With Azure SQL Database



**Days:** 1

**Audience:** Developers and Solution Architects.

**Prerequisites:** Experience with relational databases. Basic knowledge of security concepts like identities and permissions. Experience using the Azure portal to create resources and set permissions.

**Description:** This learning path prepares you for the task of developing data-driven applications by using Microsoft Azure SQL Database.

You'll learn how to create and configure an Azure SQL Database, build and deploy database projects using GitHub Actions and Azure Pipelines, and automate the publishing process. Additionally, you'll explore how to use Data API builder for Azure SQL Database and develop a data API with Azure Web Apps and Static Web App.

Furthermore, you'll gain skills in importing data via an external REST endpoint, exporting data using an Azure Function, and securing an Azure SQL Database. These essential skills will empower you to effectively develop and manage applications using Azure SQL Database.

## OUTLINE:

### LESSON 1 - GET STARTED WITH AZURE SQL DATABASE FOR MODERN APPLICATION DEVELOPMENT

- Explain deployment options
- Explore Hyperscale capabilities
- Understand the serverless compute tier
- Enable application resilience with Azure SQL Database
- Understand AI capabilities for Azure SQL Database

### LESSON 2 - DEVELOP FOR AZURE SQL DATABASE

- Create and configure an Azure SQL Database
- Use SQL Database Projects
- Build and deploy database projects in GitHub Actions and Azure DevOps
- Secure and monitor Continuous Integration and Continuous Deployment (CI/CD)

### LESSON 3 - DEVELOP A DATA API FOR AZURE SQL DATABASE

- Explore Data API Builder for Azure SQL Database

- Develop a data API using Azure Static Web Apps
- Develop a data API using Azure Web App for Containers

### LESSON 4 - EXPLORE DATA MANIPULATION OPTIONS IN AZURE SQL DATABASE

- Use RESTful endpoints to import data to Azure SQL Database
- Manipulate data in Azure SQL Database with Azure Functions
- Understand the data movement tools available

### LESSON 5 - EXPLORE SECURITY PRACTICES FOR AZURE SQL DATABASE

- Explore authentication methods
- Configure managed identity
- Understand firewall rules
- Explore advanced data security