

# DP 300 - Implement Scalable Database Solutions Using Azure SQL



**Duration:** 4 days

**Audience:** The audience for this course is data professionals managing data and databases who want to learn about administering the data platform technologies that are available on Microsoft Azure. This course is also valuable for data architects and application developers who need to understand what technologies are available for the data platform with Azure and how to work with those technologies through applications.

**Prerequisites:** Familiarity with on-premises virtualization technologies, including VMs, virtual networking, and virtual hard disks. Familiarity with network configuration, including TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies. Ability to create an on-premises SQL Server database, including the configuration of data files and log files. Ability to write code in the SQL language, particularly the Microsoft T-SQL dialect, at a basic level. Experience creating and configuring resources using the Azure portal.

**Description:** This course will teach the basics of Microsoft's dialect of the standard SQL language: Transact-SQL. Topics include both querying and modifying data in relational databases that are hosted in Microsoft SQL Server-based database systems, including: Microsoft SQL Server, Azure SQL Database, Azure Synapse Analytics, and Microsoft Fabric.

## OUTLINE:

**MODULE 1: PLAN AND IMPLEMENT DATA PLATFORM RESOURCES**

**MODULE 2: IMPLEMENT A SECURE ENVIRONMENT FOR A DATABASE SERVICE**

**MODULE 3: MONITOR AND OPTIMIZE OPERATIONAL RESOURCES IN AZURE SQL**

**MODULE 4: OPTIMIZE QUERY PERFORMANCE IN AZURE SQL**

**MODULE 5: AUTOMATE DATABASE TASKS FOR AZURE SQL**

**MODULE 6: PLAN AND IMPLEMENT A HIGH AVAILABILITY AND DISASTER RECOVERY ENVIRONMENT**