

# DP-300T00 Administering Microsoft Azure SQL Solutions

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## Course Description

This course provides students with the knowledge and skills to administer a SQL Server database infrastructure for cloud, on-premises and hybrid relational databases and who work with the Microsoft PaaS relational database offerings. Additionally, it will be of use to individuals who develop applications that deliver content from SQL-based relational databases.

## Course Duration

4 days

## Prerequisites

Successful Azure Database Administrators start this role with professional experience in database management and technical knowledge of cloud technologies.

Specifically:

- Working with, maintaining, and developing with SQL Server
- Experience with Azure, such as deploying and managing resources

At a minimum, you should know the information in the following online training before attending the course:

- AZ-900 Azure Fundamentals
- DP-900 Azure Data Fundamentals

## Course Outline

- Introduction to data engineering on Azure
- Prepare to maintain SQL databases on Azure
- Deploy IaaS solutions with Azure SQL
- Deploy PaaS solutions with Azure SQL
- Evaluate strategies for migrating to Azure SQL
- Migrate SQL workloads to Azure SQL databases
- Migrate SQL workloads to Azure Managed Instances
- Configure database authentication and authorization
- Protect data in-transit and at rest
- Implement compliance controls for sensitive data
- Describe performance monitoring
- Configure SQL Server resources for optimal performance
- Configure databases for optimal performance
- Explore query performance optimization
- Evaluate performance improvements
- Explore performance-based design
- Automate deployment of database resources
- Create and manage SQL Agent jobs

- Manage Azure PaaS tasks using automation
- Describe high availability and disaster recovery strategies
- Explore IaaS and PaaS solutions for high availability and disaster recovery
- Back up and restore databases

## Who Should Attend

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.