

**Administering Microsoft Azure SQL Solutions (DP-300)**

**Course Number:** MOC-DP-300
**Duration:** 4 days

**Overview**

This Administering Microsoft Azure SQL Solutions training (Microsoft course DP-300) teaches attendees how to administer a SQL Server database infrastructure for cloud, on-premise, and hybrid relational databases. Participants learn how to administer the data platform technologies available on Microsoft Azure and how to work with those technologies through applications. This course prepares students for the [DP-300 exam](https://docs.microsoft.com/en-us/learn/certifications/exams/DP-300) for which every attendee receives a voucher.

**Prerequisites**

In addition to their professional experience, students must have taken Accelebrate's [Azure Fundamentals course](file:////training/microsoft-azure-fundamentals) or have equivalent experience. Attendees must also have some knowledge of Azure data.

**Materials**

All Microsoft Azure training students receive Microsoft official courseware.

For all Microsoft Official Courses taught in their entirety that have a corresponding certification exam, an exam voucher is included for each participant.

**Software Needed on Each Student PC**

Attendees will not need to install any software on their computer for this class. The class will be conducted in a remote environment that Accelebrate will provide; students will only need a local computer with a web browser and a stable Internet connection. Any recent version of Microsoft Edge, Mozilla Firefox, or Google Chrome will be fine.

**Objectives**

* Administer a SQL Server database infrastructure for cloud, on-premises, and hybrid relational databases
* Administer the data platform technologies available on Microsoft Azure
* Understand what technologies are available for the data platform with Azure

**Outline**

* Introduction
* 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
* Conclusion