



DP-300: Implement scalable database solutions using Azure SQL

Microsoft - Data & AI

- **Nível:** Intermédio
 - **Duração:** 28h
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Sobre o curso

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.

After completing this course, students will be able to:

- Plan, deploy and configure Azure SQL offerings
 - Monitor database performance and tune a database and queries for optimum performance
 - Plan and configure a High Availability Solution
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Destinatários

- Data professionals managing data and databases who want to learn about administering the data platform technologies that are available on Microsoft Azure.
 - 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.
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Pré-requisitos

In addition to their professional experience, students who take this training should have technical knowledge equivalent to the following courses:

- [Azure Fundamentals](#)
- [Azure Data Fundamentals](#)

Programa

- Plan and implement data platform resources
- Implement a secure environment for a database service
- Monitor and optimize operational resources in Azure SQL
- Optimize query performance in Azure SQL
- Automate database tasks for Azure SQL
- Plan and implement a high availability and disaster recovery environment

Plan and implement data platform resources

- Deploy IaaS solutions with Azure SQL
- Deploy PaaS solutions with Azure SQL
- Evaluate strategies for migrating to Azure SQL
- Migrate SQL Server workloads to Azure SQL Database
- Migrate SQL Server workloads to Azure SQL Managed Instance

Implement a secure environment for a database service

- Configure database authentication and authorization
- Protect data in-transit and at rest
- Implement compliance controls for sensitive data

Monitor and optimize operational resources in Azure SQL

- Describe performance monitoring
- Configure SQL Server resources for optimal performance
- Configure databases for optimal performance

Optimize query performance in Azure SQL

- Explore query performance optimization
- Explore performance-based design
- Evaluate performance improvements

Automate database tasks for Azure SQL

- Automate deployment of database resources
- Create and manage SQL Agent jobs
- Manage Azure PaaS tasks using automation

Plan and implement a high availability and disaster recovery environment

- Describe high availability and disaster recovery strategies
- Explore IaaS and PaaS solutions for high availability and disaster recovery
- Back up and restore databases