

### Course Details

**Course Code:** DP-3001

**Duration:** 1 day

#### Notes:

- This course syllabus should be used to determine whether the course is appropriate for the students, based on their current skills and technical training needs.
- Course content, prices, and availability are subject to change without notice.
- Terms and Conditions apply

*Elements of this syllabus are subject to change.*

#### About this course

This learning path prepares you for the task of migrating SQL Server workloads to Azure SQL Database.

You'll learn how to assess SQL Server components and compatibility for migration using the Azure SQL Migration Extension and Database Migration Assistant. This training guides you through the process of provisioning and configuring Azure SQL Database resources. You gain hands-on experience in choosing the best migration option to meet business requirements for downtime, handling migration state, and monitoring database migration.

Additionally, you'll also learn to perform post-migration tasks like disaster recovery and monitoring for Azure SQL Database. These skills are essential for ensuring a smooth, efficient transition to Azure SQL Database, and maintaining its operation post-migration.

#### Note

***You need an Azure subscription to complete the exercises. If you don't have an Azure subscription, create a free account and add a subscription before you begin. If you're a student, you can take advantage of the Azure for students offer.***

#### Prerequisites

- Experience with SQL Server databases.
- Knowledge of SQL Server editions and versions.
- Basic knowledge of security concepts like identities and permissions.
- Experience using the Azure portal to create resources and set permissions.

#### Academy IT Pty Ltd

Level 4, 45 Grenfell Street  
ADELAIDE 5000

Email: [sales@academyit.com.au](mailto:sales@academyit.com.au)

Web: [www.academyit.com.au](http://www.academyit.com.au)

Phone: 08 7324 9800

Brian: 0400 112 083

### Design a SQL Server migration strategy

In this module, you'll learn the phases of a migration and the steps involved to ensure your migration project is executed smoothly. You'll also learn the purpose of data platform modernization and see the benefits it can bring to your organization.

#### Learning objectives

By the end of this module, you'll be able to:

- Explain what data platform modernization is
- Review the stages of a data migration
- Recommend when to use an Azure data platform technology
- Explore the cost savings of moving your SQL workloads to Azure

### Assess SQL Server databases for migration to Azure SQL

Assessment tools such as Azure SQL Migration extension for Azure Data Studio, Azure Migrate, and Data Migration Assistant facilitate the migration of SQL Server databases to Azure.

#### Learning objectives

In this module, you'll:

- Understand common compatibility issues and blockers that may prevent a migration to Azure SQL.
- Discover the various tools and options available for assessing SQL Server databases for migration purposes.
- Use the Azure migration extension for Azure Data Studio to assess SQL Server databases.
- Use the Azure Migrate to assess SQL Server databases.
- Use Data Migration Assistant (DMA) to assess SQL Server databases.

### Deploy PaaS solutions with Azure SQL

Provision and deploy Azure SQL Database and Azure SQL managed instance. Select the appropriate options when performing a migration to the SQL PaaS platform.

#### Learning objectives

After completing this module, you will be able to:

- Gain an understanding SQL Server in a Platform as a Service (PaaS) offering

- Understand PaaS provisioning and deployment options
- Understand elastic pools
- Examine Azure SQL Managed Instances
- Explore Azure SQL Edge
- Configure a template for PaaS deployment

### Configure database authentication and authorization

Contrast authentication using Microsoft Entra ID, Windows Active Directory, and SQL Server authentication. Implement various security principals and configure permissions.

#### Learning objectives

After completing this module, you will be able to:

- Learn about authentication options for Azure SQL Database
- Create various security principals
- Configure permissions within a SQL database
- Identify authentication and authorization failures

### Migrate SQL Server workloads to Azure SQL Database

You will explore different migration tools and migrate SQL Server databases to Azure SQL Database.

#### Learning objectives

In this module, you'll:

- Explore the advantages, capabilities, and migration possibilities offered by Azure SQL Database.
- Migrate databases using Azure SQL Migration extension for Azure Data Studio and tracking database migration activities.
- Use the Data Migration Assistant (DMA) tool to facilitate SQL Server migrations to Azure SQL Database.
- Use transactional replication as an online method to migrate to Azure SQL Database.
- Explore several other methods for migrating SQL Server databases to Azure SQL Database.

### **Perform post-migration tasks on Azure SQL**

You'll explore different features and tools to help you maintain Azure SQL environments.

#### **Learning objectives**

At the end of this module, you'll be able to:

- Implement compliance controls for sensitive data.
- Monitor database performance in Azure SQL.
- Configure high availability and disaster recovery in Azure SQL.
- Automate database tasks for scalability.