

# **Professional Azure SQL Database Administration** (3 Days)

## **About this Course**

Azure SQL Database is the cloud version of SQL Server. It differs in terms of management, maintenance, and administration. It's important to know how to administer SQL Database so that you can get the most out of the features that it provides. This course addresses different management aspects of an Azure SQL Database such as migration, backup and restore, pricing, security, scalability, monitoring, and performance optimization, high availability and disaster recovery.

This is a 3-day course which balances theory and hand-on applications that are focused on practical takeaways. Built with a narrative of a DBA, who is migrating from a traditional on-premises system to Azure SQL Database, this course emulates the different scenarios you might come across while working with Azure SQL Database.

This course is for database administrators, database developers, or application developers interested in developing new or migrating existing applications with Azure SQL Database.

#### **Course Benefits**

- Learn to provision a new Azure SQL database and migrate an existing on-premise SQL Server database to Azure SQL Database.
- Learn to back up and restore an Azure SQL Database.
- Learn to secure and scale an Azure SQL Database.
- Learn to monitor and tune an Azure SQL Database.
- Learn to implement high availability and disaster recovery with a Azure SQL database.
- Learn to automate common management tasks with PowerShell.
- Learn to develop a scalable cloud solution with SQL Database.

## **Class Prerequisites**

Experience in the following is required for this Azure class:

- Prior experience of working on an on-premises SQL Server
- Knowledge of PowerShell.

## **COURSE OUTLINE**

# 1. Microsoft Azure SQL Database Primer

Azure SQL Database Architecture

# 2. Migrating an SQL Server Database to an Azure SQL Database

Azure SQL Database Service Tiers Determining an Appropriate Service Tier Determining Compatibility Issues Determining the Migration Method

# 3. Backing up the SQL Database

Automatic Backups Manual Backups

# 4. Restoring an Azure SQL Database

**Restore Types** 

## 5. Securing an Azure SQL Database

Access Control
Proactive Security
Scaling Out Azure SQL Database
Vertical Scaling
Horizontal Scaling

#### 6. Elastic Pools

Introducing Elastic Pools Elastic Jobs

# 7. High Availability and Disaster Recovery

High Availability
Disaster Recovery

# 8. Monitoring and Tuning Azure SQL Database

Monitoring an Azure SQL Database Using the Azure Portal Tuning an Azure SQL Database