

Develop AI-enabled database solutions (DP-800T00)

Duration: 3 Days

Audience: Professionnel TI

Who is this training for?

The audience for this course is data professionals who want to learn about designing and developing AI-enabled database solutions across Microsoft's SQL platforms, including SQL Server, Azure SQL, and SQL databases in Microsoft Fabric. This role develops database solutions that include both structured and semi-structured data and integrates AI features into modern and highly scalable enterprise applications.

Training objectives

By

the end of this course, students will be able to:

- Design and build database solutions using structured and semi structured data
- Integrate AI features into modern, scalable applications.
- Secure, optimize, and deploy enterprise grade SQL solutions.
- Implement AI capabilities directly within database architectures.

Summary

This course provides students with the knowledge and skills to design and develop AI enabled database solutions across Microsoft SQL platforms, including SQL Server, Azure SQL, and SQL databases in Microsoft Fabric. It is intended for professionals who build modern data solutions that integrate structured and semi structured data and incorporate AI features into scalable enterprise applications. It will also be valuable for individuals who develop applications that rely on SQL based data services enhanced with vector search, embeddings, and other AI driven capabilities.

Course outline

Learning Path 1 — Design and develop database solutions

- Module 1 — Design and implement database objects with SQL
- Module 2 — Implement programmability objects with SQL
- Module 3 — Write advanced T SQL code
- Module 4 — Implement SQL solutions by using AI assisted tools

Learning Path 2 — Secure, optimize, and deploy database solutions

- Module 1 — Implement data security and compliance with SQL
- Module 2 — Optimize database performance
- Module 3 — Implement CI/CD by using SQL Database Projects
- Module 4 — Integrate SQL solutions with Azure services

Learning Path 3 — Implement AI capabilities in database solutions

- Module 1 — Design and implement intelligent search with SQL
- Module 2 — Design and implement models and embeddings with SQL
- Module 3 — Design and implement RAG with SQL

Approach and methodology

A practical and structured learning experience combining targeted theory with guided, hands on exercises. Participants progressively explore how to design and develop AI enabled database solutions across Microsoft SQL platforms, working through scenarios that reflect real enterprise environments.

They apply concepts related to structured and semi structured data, AI driven capabilities, vector search, and embeddings to build modern, scalable SQL architectures.

Led by a Microsoft Certified Trainer (MCT) , the training emphasizes interactivity, technical depth, and the development of skills that can be immediately transferred to professional data solution projects.

Prerequisites

Students

should have the following knowledge and experience before attending this course:

- Writing T-SQL code and developing databases in Microsoft SQL platforms.
- To be familiar with continuous integration and continuous deployment (CI/CD) practices in GitHub
- AI-assisted development tools
- AI concepts, such as embeddings, vectors, and models.

Recommendations

Optional prerequisites:

- Practical knowledge of advanced SQL Server features
- Familiarity with Azure SQL in application level scenarios
- Understanding of semi structured data (JSON and similar formats)
- Awareness of scalable enterprise solution design principles
- Familiarity with AI concepts applied to database systems
- Understanding of vector search and embeddings
- Prior exposure to SQL architectures enhanced with AI capabilities

Microsoft complementary courses:

- DP 300 — Administering Microsoft Azure SQL Solutions
- DP 100 — Designing and Implementing an Azure Machine Learning Solution

- AI 103 — Develop AI apps and agents on Azure
- AZ 305 — Designing Microsoft Azure Infrastructure Solutions

Certifications

[Microsoft Certified: SQL AI Developer Associate](#)