DP-800T00: Develop AI-enabled database solutions

Category: AI, Data & Analytics | **Vendor:** Microsoft Technical

Duration: 32.00 hours (4 days) **26.0 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format:	Instructor Led - Online
Certification:	Microsoft Applied Skills: Develop AI-enabled database solutions
Related Exam:	DP-800

Course Overview

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.

About This Course

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Who Should Attend

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.

Detailed Course Outline

1 - Design and implement database objects with SQL

- Understand your SQL Server-based platform choices
- Build effective tables
- Optimize with indexes
- Use specialized table types
- Enforce data integrity with constraints
- Manage JSON columns and indexes
- Partition tables for scale
- Module assessment

2 - Implement programmability objects with SQL

- Create views
- Create stored procedures
- Create scalar functions
- Create table-valued functions
- Create triggers
- Choose when to use each option

3 - Write advanced T-SQL code

- Organize queries with Common Table Expressions
- Apply window functions for analytics
- Process JSON data with built-in functions
- Match patterns with regular expressions
- Find approximate matches with fuzzy string functions
- Traverse relationships with graph queries
- Compare rows with correlated subqueries
- Handle errors with TRY...CATCH
- Module assessment

4 - Implement SQL solutions by using AI-assisted tools

- Describe AI-assisted development tools available for Microsoft SQL platforms
- Interpret security impact of using AI-assisted tools
- Enable GitHub Copilot and Fabric Copilot
- Configure model and Model Context Protocol (MCP) tool options in a GitHub Copilot or Fabric Copilot chat session
- Create and configure GitHub Copilot instruction files
- Connect to MCP server endpoints, including Microsoft SQL Server and Fabric Lakehouse
- Module assessment

5 - Implement data security and compliance with SQL

- Protect data with encryption
- Configure dynamic data masking
- Implement row-level security
- Manage permissions and secure access
- Implement auditing
- Configure secure access to AI services
- Secure data API endpoints
- Module assessment

6 - Optimize database performance

- Recommend database configurations
- Preserve data integrity with transaction isolation levels and concurrency controls
- Evaluate query performance with execution plans and DMVs
- Monitor and tune queries with Query Store and Query Performance Insight
- Identify and resolve blocking and deadlocks

7 - Implement CI/CD by using SQL Database Projects

- Create, build, and validate SQL Database Projects
- Configure source control and manage reference data
- Manage branching, pull requests, and conflict resolution
- Detect and resolve schema drift
- Implement CI/CD pipelines
- Design and implement a testing strategy

8 - Integrate SQL solutions with Azure services

- Create configuration files for Data API Builder
- Define entities for REST and GraphQL
- Expose database objects, stored procedures, and views
- Explore deployment options for Data API Builder
- Recommend Azure Monitor configurations
- Handle changes with event-driven patterns
- Module assessment

9 - Design and implement models and embeddings with SQL

- Understand and evaluate models for SQL database workloads
- Create and manage external models in SQL
- Design embeddings for SQL database workloads
- Generate and maintain embeddings for SQL database workloads

10 - Design and implement intelligent search with SQL

- Choose an intelligent search approach
- Implement full-text search
- Prepare SQL for vector search
- Implement vector search query patterns
- Implement hybrid search and ranking

11 - Design and implement RAG with SQL

- Identify RAG use cases and architecture
- Prepare retrieval context for augmentation
- Augment prompts with database context
- Generate and process RAG responses

□□ Certification Path

Microsoft Applied Skills: Develop AI-enabled database solutions

Exam: DP-800

Frequently Asked Questions

Q: What delivery options are available for DP-800T00: Develop AI-enabled database solutions?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: What certification does this course prepare me for?

The DP-800T00: Develop AI-enabled database solutions course helps prepare you for the Microsoft Applied Skills: Develop AI-enabled database solutions certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the DP-800 official exam. You can take this exam at any exam center across United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online wherever you are located.

Q: How many CPD hours does this course provide?

The 4-day DP-800T00: Develop AI-enabled database solutions course provides up to 26.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the DP-800T00: Develop AI-enabled database solutions training?

The training takes place over 4 day(s), with each day lasting approximately 32.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for DP-800T00: Develop AI-enabled database solutions?

Yes, we provide corporate training, dedicated training, and closed classes for DP-800T00: Develop AI-enabled database solutions. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: DP-800T00: Develop AI-enabled database solutions, Microsoft, vILT, DP-800T00

Q: Why choose Nexus Human for DP-800T00: Develop AI-enabled database solutions?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your DP-800T00: Develop AI-enabled database solutions training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

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