



## DP-080: Query and modify data with Transact-SQL

Microsoft - Data & AI

Live Training ( também disponível em presencial )

- **Localidade:**
- **Data:** 27 Jan 2025
- **Preço:** 765 € ( Os valores apresentados não incluem IVA. Oferta de IVA a particulares e estudantes. )
- **Horário:** Laboral das 9h00 às 12h30
- **Nível:** Entrada
- **Duração:** 14h

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### Sobre o curso

This course will teach the basics of Microsoft's dialect of the standard SQL language: Transact-SQL.

Topics include both querying and modifying data in relational databases that are hosted in Microsoft SQL Server-based database systems, including: Microsoft SQL Server, Azure SQL Database and, Azure Synapse Analytics.

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### Destinatários

This course can be valuable for anyone who needs to write basic SQL or Transact-SQL queries.

- This includes anyone working with data as a data analyst, a data engineer, a data scientist, a database administrator or a database developer.
- It can also be useful for others peripherally involved with data, or wanting to learn more about working with data such as solution architects, students and technology managers.

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### Objetivos

- Introduce relational databases, the SQL language and Transact-SQL
  - Sort and filter query results
  - Explore T-SQL queries accessing data from multiple tables with various kinds of JOIN operations
  - Use subqueries to combine multiple SELECT statements and compose nested queries
  - Use functions in Transact-SQL, and how to group aggregated results
  - Use Transact-SQL to insert, update, and delete data in a database
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# Programa

- Introduction to Transact-SQL
- Sort and filter results in T-SQL
- Combine multiple tables with JOINS in T-SQL
- Write Subqueries in T-SQL
- Use built-in functions and GROUP BY in Transact-SQL
- Modify data with T-SQL

## **Introduction to Transact-SQL**

- Work with schemas
- Explore the structure of SQL statements
- Examine the SELECT statement
- Work with data types
- Handle NULLs
- Exercise - Work with SELECT statements
- Knowledge check

## **Sort and filter results in T-SQL**

- Sort your results
- Limit the sorted results
- Page results
- Remove duplicates
- Filter data with predicates
- Exercise - Sort and filter query results
- Knowledge check

## **Combine multiple tables with JOINS in T-SQL**

- Understand joins concepts and syntax
- Use inner joins
- Use outer joins
- Use cross joins
- Use self joins

- Exercise – Query multiple tables with joins
- Knowledge check

### **Write Subqueries in T-SQL**

- Understand subqueries
- Use scalar or multi-valued subqueries
- Use self-contained or correlated subqueries
- Exercise – Use subqueries
- Knowledge check

### **Use built-in functions and GROUP BY in Transact-SQL**

- Categorize built-in functions
- Use scalar functions
- Use ranking and rowset functions
- Use aggregate functions
- Summarize data with GROUP BY
- Filter groups with HAVING
- Exercise – Use built-in functions
- Knowledge check

### **Modify data with T-SQL**

- Insert data
- Generate automatic values
- Update data
- Delete data
- Merge data based on multiple tables
- Exercise – Modify data
- Knowledge check