

# Creating Database Queries on the MS SQL Server Platform



## Purpose of the training

Training for users who want and should learn the standard language of communicating with databases, in particular with MS SQL Server.



## Benefits of completing the training

Students will learn about the world standard in communicating with databases. They will learn to retrieve data from the database using the T-SQL language. They will be able to optimize the queries that are created by the wizard in the MS Query tool in Excel.



## Expected Listener Preparation

Good knowledge of the Windows environment. Good knowledge of Excel.



## Training Language

- Training: English



## Duration

2 days / 14 hours

## Training agenda

1. Discussion of the basic issues related to relational databases (on the example of the database on the SQL Server platform)
  - Tables
  - Fields
  - Keys
  - Indices
  - Relations
  - Integrity ties
  - Views
  - Stored procedures.
2. Creating selection questions (SQL language)
  - SELECT phrase
  - Data filtering (WHERE)
  - Data sorting (ORDER BY)
  - Grouping data (GROUP BY)
  - Aggregating data (SUM, AVG, MIN, MAX, COUNT)
  - Joining tables (WHERE ... = ..., WHERE ... IN ..., INNER JOIN, LEFT JOIN, etc.)
  - Combining data from various databases
  - Using text functions (LEFT, RIGHT, SUBSTRING, etc.)
  - Conditional phrases
  - Data type conversion.
3. Creating functional queries
  - Adding data (INSERT)
  - Modifying data (UPDATE)
  - Deleting data (DELETE)
  - Deleting tables (DROP TABLE).
4. Downloading data from SQL Server using Microsoft Excel
  - Creating connections to MS SQL Server data
  - MS Query supplement.