

## Standard SQL-3 & In-depth («SQLB»)

An intensive introductory seminar for DB project managers, developers and administrators as well as an additional in-depth day: «Learning SQL by doing SQL».

**Duration:** 3 days

**Price:** 2'700.–

## Content

### Day 1 and 2:

1. Repetition of the basic concepts of relational databases
  - Database
  - Table (entities, attributes)
  - Data types (value ranges)
  - Primary, foreign key
  - Relations
  - Data Consistency, Referential Integrity
  - View
  - Index
  - ERM
2. SQL basics
  - History
  - Application (basic concept)
  - SQL properties
  - SQL syntax diagrams
  - Naming conventions for objects
3. Data retrieval, data evaluation and data manipulation (DML)
  - SELECT
  - Simple queries
  - Constant Columns, Calculated Columns, Aliases
  - DISTINCT
  - ORDER BY
  - TOP
  - WHERE
  - Aggregate functions
  - GROUP BY / HAVING
    - JOIN (INNER, OUTER, FULL, SELF, CROSS)
  - Subqueries
  - UNION
  - SELECT INTO
4. Adding data
  - INSERT (VALUES, SELECT)
  - UPDATE
  - DELETE
5. Data Definition Language (DDL)
  - CREATE DATABASE
  - CREATE TABLE
  - Constraints (PRIMARY KEY, FOREIGN KEY, UNIQUE )
  - DROP TABLE
  - CREATE VIEW
  - OLD VIEW

- DROP VIEW
- CREATE PROCEDURE
- 6. Data control language (DCL)
  - Transaction management
  - COMMIT & ROLLBACK
  - GRANT & REVOKE

### Day 3:

Practical review of SQL Basics within a bigger course project:

- SELECT, WHERE
- GROUP BY, HAVING
- INNER and OUTER JOINS

Additional topics:

- DATETIME Functions
- FORMATTING Functions
- CASE STATEMENT
- VIEWS
- Extended Q&A

## Key Learnings

- This course will provide you with solid SQL basics. You will learn everything you need to know to thoroughly master Standard SQL.
- Practical exercises provide an immediate plus in your daily work routine.
- The specially developed Digicomp course documentation also provides you with helpful practical tips after the course.
- In-depth practice day putting together all the skills learned in the SQL Standard Course.
- Additional SQL Basics further covering today's on-the-job requirements.

## Target audience

This course is aimed at programmers, PC administrators and other people who want to work with an SQL-enabled database or create applications using the SQL capabilities of the database system, as well as people who want to systematically inform themselves about SQL, its possibilities, limitations and meaning.

## Additional information

This course is manufacturer-independent. So it does not matter if you work with Oracle, SQL Server, MySQL, DB2, PostgreSQL, MariaDB, TeraData or other relational database systems.

## Any questions?

We are happy to advise you on +41 44 447 21 21 or [info@digicomp.ch](mailto:info@digicomp.ch). You can find detailed information about dates on [www.digicomp.ch/courses-microsoft-technology/microsoft-server/course-standard-sql-3-in-depth](https://www.digicomp.ch/courses-microsoft-technology/microsoft-server/course-standard-sql-3-in-depth)