

Training: Capstone Courseware
301 Introduction to SQL



FORM OF TRAINING	MATERIALS	PRICE	DURATION
Traditional	Hardcopy	725 EUR	3 days
Traditional	CTAB Tablet	825 EUR	3 days
Distance learning	Hardcopy	725 EUR	3 days
Distance learning	CTAB Tablet	725 EUR	3 days

LOCATIONS

Krakow - 5 Tatarska Street, II floor, hours: 9:00 am - 4:00 pm
Warsaw - 17 Bielska Street, hours: 9:00 am - 4:00 pm

TRAINING GOALS:

Version 1.0

This course provides an in-depth introduction to the **Structured Query Language**, or **SQL**. Students learn key concepts of relational databases and query design, and have extensive opportunities to write database queries. The course also introduces table design and database update statements.

Learning Objectives

- Understand the structure of relational databases.
- Write simple select-from-where style queries.
- Write standard and correlated subqueries.
- Write queries that use all styles of table join.
- Build database tables, and write insert, update, and delete statements to modify data.

CONSPECT:

- Relational Databases and SQL
 - Relational Databases
 - SQL
 - Schema
 - Integrity
 - DDL

- DML
- Tools
 - Tools and Environment
 - Creating the Course Schema
- The select Statement
 - SQL Syntax
 - Basic Query Structure
 - Null Values
 - Result Sets
- The select Clause
 - The Expression List
 - Character Expressions
 - Column Headers and Aliases
 - Mathematical Expressions
 - Functions
 - Using distinct
- The where Clause
 - Filtering Predicates
 - SQL Operators and Precedence
 - Equality and Inequality Operators
 - Logical Operators
 - between
 - like
 - in
 - is null
 - Functions
- The order by Clause
 - Sorting by Column Names
 - Sorting by Expressions
 - Sorting by Ordinal
- Aggregate Functions
 - Aggregates
 - count
 - avg
 - Querying Groups
 - Grouping and the where Clause

- Choosing and Filtering Groups
- Standard Subqueries
 - What is a Subquery?
 - Standard Subqueries
 - Using Aggregate Functions
 - Subquery Operators
- SQL-Standard Joins
 - Why Joins?
 - Foreign Keys and Joins
 - Qualifying Columns
 - Table Aliases
 - Inner and Outer Joins
- Correlated Subqueries
 - Correlated Subqueries
 - Subqueries and Scope
 - Performance
- DDL for Tables
 - Tables
 - Object Names
 - Data Types
 - Creating a Table
 - Dropping a Table
- Maintaining the Data in Tables
 - Identifying Column Position and Data Type
 - The insert Statement
 - The update Statement
 - The delete Statement
 - Transaction Control
 - Auto-Commit

REQUIREMENTS:

- No formal prerequisites.

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by Capstone Courseware.

TRAINER:

Authorized Capstone Courseware Trainer.