
Title: **SQL fundamentals, basics of PL-SQL**

Target audience: Business consultants, analysts, system engineers

Duration: 2 days, 6 hours/day (8*45 min)

Description This course introduces the SQL (Structured Query Language). The audience will get an overview of the database architectures, database management systems guidelines, and the most important queries. The course also offers a hands-on lab part that helps to get used to make queries.

Learning objectives At the end of the course, students will be able to:

- Understand the basic concepts and architecture of database systems
- Implement simple SQL queries
- Implement simple PL-SQL programs

Outline

Day 1: Introducing database system architecture and SQL

1. Introduction of the database systems
2. Introduction of the relational databases
3. SQL architecture, elements: INSERT, UPDATE, DELETE, simple SELECT

Day 2: Basic SQL queries, PL-SQL

1. Creating more complicated SELECTs
2. Join more tables
3. Sorting
4. WHERE clause
5. Built-in queries
6. Basic PL-SQL elements
7. Hands-on-lab: implementing some queries on sample database

Prerequisites To complete this course, you need:

- A Pentium IV, 1 GB RAM computer
- Oracle SQL database system client
- Basic math knowledge about set theory