# Oracle SQL

Hands-on course of 3 days - 21h Ref.: OSL - Price 2024: CHF1 970 (excl. taxes)

The price for the 2025 session dates may be revised

# **EDUCATIONAL OBJECTIVES**

At the end of the training, the trainee will be able to:

Understand the relational model

Identify the objects of an Oracle database.

Query and classify data in a table

Work with data in database tables.

Know how to return data

# THE PROGRAMME

last updated: 01/2018

## 1) Introduction

- The relational model
- Basic concepts: relationship (table), attributes (columns), integrity constraints.
- Integrity constraints.

## 2) Tools

- Overview of SQL\*Plus.
- Overview of SQL Developer.

### 3) Introduction to SQL.

- Oracle data types.
- - Creating tables.
- Introduction to update instructions.
- Using sequences.
- Introduction to querying (SELECT).

### 4) Data querying

- Sorting and deleting duplicates. Aliases and prefixes. Using Fetch and Offset.
- Handling the NULL value. Using SQL functions.
- Using pseudo-columns: ROWID and ROWNUM. Using aggregates: COUNT, SUM, AVG, etc.
- Set operations: union, intersection, difference.
- Nested queries: IN, EXISTS operators.
- Use of joins.
- External joins.
- Grouping: GROUP BY and HAVING.

## 5) Objects of an Oracle database

- Creating and deleting tables.
- Integrity constraint management: primary key, uniqueness, non-nullity, CHECK, referential constraints.
- Use of views.
- Use of synonyms.
- Data dictionary.

#### TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

#### **ASSESSMENT TERMS**

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, handson work and more.

Participants also complete a placement test before and after the course to measure the skills they've developed.

# TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
  A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

## TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

# ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@ORSYS.fr to review your request and its feasibility.

# 6) Complex SQL statements

- Configuring SQL\*Plus scripts.
- Division and complex queries.
- Update statements with nested queries.
- Hierarchical queries.
- Using regular expressions.

# **DATES**

## REMOTE CLASS

2024 : 18 Dec

2025 : 20 Jan, 14 Apr, 06 Aug, 05 Nov