

Introduction to SQL

Duration

In person: 1 day

LiveOnline: 2 sessions of 4.5 hours each

Intended for

This course is designed for anyone who needs to be able to access relational data using SQL, including:

- Developers.
- Test analysts and engineers.
- Business and systems analysts.
- Data analysts.

Prerequisites

There are no prerequisites for this course.

Method Used

This is a hands-on course. You will have dedicated use of a workstation for the database exercises and you'll apply what you learn to an SQL Server or Oracle database.

Do you need to analyse and work with large volumes of data? For anyone looking to improve their knowledge of SQL (Structured Query Language) this course will teach you how to write SQL SELECT statements to retrieve and analyse your data from a relational database.

Learning Outcomes

During this module you will learn about:

- Writing SQL SELECT statements in a structure way, starting with visualising the desired output.
- Ordering the data according to your needs.
- Filtering the records to get only the relevant information.
- Using expressions and scalar functions to transform the data.
- Using inner joins to read data from multiple tables simultaneously.
- Finding unmatched records with outer joins.
- Using aggregate functions to summarise your data
- Reclassifying your data with new criteria

Content

- Understand the nature of relational databases.
- Read records and fields with SELECT / FROM.
- Eliminate unwanted duplicate values with DISTINCT.
- Sort the records with ORDER BY.
- Filter the records with WHERE to select only those records you are interested in.
- Use the conditional operators with WHERE.
- Return the fields in the desired format with expressions.
- Apply the various scalar functions.
- Read records from two tables with inner joins.
- Read records from many tables.
- Know when and why to use outer joins, and how to implement them.
- Summarise data with aggregate functions.
- Group records with GROUP BY.
- Filter groups with HAVING.
- Derive new classifications of records with CASE.

Delivery:

This program is offered as a classroom-based course as well as a LiveOnline program. Our LiveOnline delivery is over two days (each four and a half hours in duration). The instructor is 100% live and interaction and learning objectives are the same as our in-person classes with the added benefit of being able to take this course from your home, your office or your home office. Since this class is delivered over half-days it allows for greater flexibility and leaves you with time each day for other work or activities.