



# SQL Querying: Fundamentals



## DURATION

1 Day

## COURSE OVERVIEW

Many organisations use databases to store their most critical information. After the information is stored, it is useless unless you can retrieve it and the language you use to retrieve information from SQL Server 2012 is the Structured Query Language (SQL). This course will teach you to use SQL as a tool to retrieve information you need from the business for further business analysis.

## TARGET AUDIENCE

The course is designed for people with basic computer skills, who are familiar with concepts related to database structure and terminology and who want to use SQL to query databases.

## LEARNING OBJECTIVES

On completion of this course, you will be able to:

- Connect to the SQL Server database and execute a simple query.
- Include a search condition in a simple query.
- Use various functions to perform calculations on data.
- Organise the data obtained from a query before it is displayed on screen.
- Retrieve data from multiple tables.
- Export the results of a query.

## PRE-REQUISITES

To be successful in this course, you should have basic computer skills and some familiarity with database concepts and terminology are required.

## COURSE CONTENTS

### Executing a Simple Query

- Connect to the SQL database.
- Query and save a database.
- Modify and execute a saved query.

### Performing a Conditional Search

- Search using one or more conditions.
- Search for a range of values and NULL values.
- Search data based on patterns.

### Working with Functions

- Perform date calculations.
- Calculate data using aggregate functions.
- Manipulate string values.

### Organising Data

- Sort, rank and group data.
- Filter and summarise grouped data.
- Use PIVOT and UNPIVOT operators.

### Retrieving Data from Multiple Tables

- Combine and compare the results of two queries.
- Retrieve data by joining tables.

### Exporting Query Results

- Generate a text and html file.