

# Introduction to SQL

## 2 day training course



## Course contents

This course will cover the following topics. Those marked with (\*) will be covered if time allows.

### Using SQL Server

- SQL Server Management Studio
- Controlling windows
- Using Object Explorer

### Creating databases - overview

- Designing databases
- Primary keys

### Working with tables

- Creating tables
- Allowing nulls or not
- Identity fields
- Creating relationships

### Query Designer

- Building queries
- Editing queries in the designer

### Simple Queries

- Creating queries
- Comments
- Indentation and case

### Setting criteria using WHERE

- Wildcards (% and \_)
- Setting criteria for dates
- Coping with nulls

### Calculations

- Calculated columns
- Using aliases
- String functions and concatenation

### Calculations using dates

- GetDate
- Converting dates
- Useful date functions

### Basic joins

- Inner joins
- Table aliases
- Left and right outer joins

### Aggregation and grouping

- SUM, AVG, MIN, MAX
- Various ways to count
- Grouping by fields
- Using HAVING to filter results

### Views

- The view designer
- Limitations of the designer
- Scripting views

### Subqueries (\*)

- The concept of a subquery
- Syntax of subqueries
- Using subqueries in a query

### Derived tables and CTEs (\*)

- Using derived tables
- Common Table Expressions (CTEs)
- Multiple CTEs in a single query

## Pre-requisites for Introduction to SQL course

There aren't any pre-requisites for this course, although you'll find it easier if you've already seen a relational database (one with lots of tables joined together). The course uses SQL Server Management Studio, although if you're booking an onsite SQL course we will on request use Azure Data Studio instead.

## Prices

Venue	Address	Price per place
<a href="#">London</a>	Landmark, 99 Bishopsgate, London EC2M 3XD	£1,425 per person + VAT
<a href="#">Manchester</a>	Holiday Inn, 25 Aytoun Street, Manchester M1 3AE	£1,050 per person + VAT
<a href="#">Online</a>	Your home or office!	£875 per person + VAT

## Scheduled Dates

Dates	Venue	Times	Price per place	Booking
Mon/Tue 21-22 July 2025	Online	09:30-16:30	£875 + VAT	<a href="#">Book this</a>
Wed/Thu 06-07 August 2025	Online	09:30-16:30	£875 + VAT	<a href="#">Book this</a>
Wed/Thu 20-21 August 2025	Online	09:30-16:30	£875 + VAT	<a href="#">Book this</a>
Mon/Tue 01-02 September 2025	Manchester	09:30-16:30	£1,050 + VAT	<a href="#">Book this</a>
Thu/Fri 18-19 September 2025	Online	09:30-16:30	£875 + VAT	<a href="#">Book this</a>

If you can't see the dates that you want, ask us about organizing a customized course at your office (we'll provide and set up the computers), or else an online course tailored to your needs.

