Fast track SQL

3 day training course







Course contents

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

From our Introduction to SQL course

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

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

Wise Owl Training

From our Advanced SQL course

Stored procedures

- Creating stored procedures
- Executing stored procedures
- System stored procedures

Variables

- Declaring variables
- SET versus SELECT
- Tricks with variables
- So-called global variables

Parameters and return values

- Passing parameters
- Default values / WHERE clauses
- Output parameters
- Using RETURN

Scalar functions (*)

- What they are
- Writing user-defined functions
- Worked examples
- Pros and cons of scalar functions

Testing conditions

- IF / ELSE statement
- Using CASE where possible

Looping

- Syntax of WHILE
- Breaking out of a loop

Error-handling (*)

- Using TRY / CATCH
- System error functions
- Custom error messages

Deleting using SQL

- Ways to drop tables
- DELETE versus TRUNCATE

Updating data in SQL

- The UPDATE statement
- Updating using joins

Inserting data

- Making tables (SELECT INTO)
- Appending data (INSERT INTO)
- Inserting individual rows

Creating tables

- Creating tables in SQL
- Primary keys and indexes
- Adding relationships

Transactions (*)

- Beginning a transaction
- Committing / rolling back

Temporary tables and table variables

- Scope (local versus global)
- Using temporary tables
- Creating table variables
- Pros and cons of each approach

Table-valued functions (*)

- In-line table-valued functions
- Mult-statement table-valued functions

Dynamic SQL (*)

- Building up dynamic SQL
- Executing dynamic SQL
- Disadvantages of dynamic SQL

Pivots (*)

- Assembling data for pivoting
- Using PIVOT
- Dynamic column headers

Triggers (*)

- Insert, update and delete triggers
- Using generated tables (eg INSERTED)
- Using INSTEAD OF

Pre-requisites for Fast track SQL course

There are no special pre-requisites for you to satisfy to attend this course, other than to have a good level of IT literacy. If you don't find it easy to create Excel formulae you should avoid this course!

Prices

Venue	Address	Price per place
London	Landmark, 99 Bishopsgate, London EC2M 3XD	£1,995 per person + VAT
Manchester	Holiday Inn, 25 Aytoun Street, Manchester M1 3AE	£1,695 per person + VAT
Online	Your home or office!	£1,350 per person + VAT

Scheduled Dates

Dates	Venue	Times	Price per place	Booking
Mon/Wed 30th Nov/2nd December 2026	Online	09:30-16:30	£1,350 + VAT	Book this
Mon/Wed 18-20 January 2027	Online	09:30-16:30	£1,350 + VAT	Book this
Mon/Wed 01-03 March 2027	Online	09:30-16:30	£1,350 + VAT	Book this
Wed/Fri 14-16 April 2027	Online	09:30-16:30	£1,350 + VAT	Book this
Mon/Wed 24-26 May 2027	Online	09:30-16:30	£1,350 + VAT	Book this

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.