This SQL training course will teach the student how to read and write good SQL for querying, updating and maintaining SQL Server databases.

The course progresses through the elements of the language to build a thorough appreciation and understanding of SQL's capabilities and power.

Our SQL Training course covers ANSI-standard SQL and some of the common extensions.

This **SQL training course** is made up of a mix of theory and practical sessions. You will complete a series of exercises that cover all the important components of the language and allow you to practise your SQL with the help of our expert, experienced trainers.

We also provide private and in-company **SQL Training courses.** Call +44 (0)1273 622272.

Course Objectives

On completion of this Structured Query Language (SQL) training course, delegates will be able to:

- describe where the SQL language came from and its set-based mode of operation
- write SQL statements to create and manipulate database objects and data
- read SQL effectively
- write queries to join many related tables
- use the features of the language to safeguard the data and its value to the user
- recognise the dangers inherent in the language that may return the right result but would be fatally flawed with different data

- Using SQL
- Using Object Explorer
- Hiding system objects

Creating Databases

- Designing Databases
- Primary Keys
- Indexing Fields

Working with Tables

- Creating Tables
- Allowing Nulls
- Identity Fields
- Database Diagrams
- Designing Database Diagrams
- Joining Tables

Data Manipulation Language

- SELECT, DISTINCT Operations
- Functions
- Ordering Data
- Inserting, Updating & Deleting Rows

Queries

- Writing Queries
- Indentation and Case
- Setting Criteria using WHERE
- Wildcards
- Setting Criteria for Dates
- Dealing with Nulls

Exporting

- Results, Text and Grid Options
- Copying and Pasting Column Headings
- Exporting using SQL & the Menu

Calculations

- Calculated Columns
- Aliases
- String Functions and Concatenation
- Using GetDate
- Converting Dates
- Useful Date Functions

Joins

- Inner Joins

- Self Joins

Aggregation and Grouping

- SUM, AVG, MIN, MAX
- Counts
- Grouping by Fields
- Using HAVING to Filter Results

Views

- The View Designer
- Limitations of the Designer
- Scripting Views

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