

DB72-MS

3 Day

## Intermediate T-SQL-MS SQL Server

*This course presents the SQL language, its basis and current versions as supported by SQL Server. Delegates will learn how to declare tables and how to write effective SQL statements to query, update, delete and insert records into a relational database. The use of EXPLAIN for efficient Queries is described and attendees will also see how to use MS Access to front-end to MS SQL Server database. The course also covers T-SQL for Stored Procedures and Triggers.*

*The course addresses SQL2 and SQL3 standards. Delegates receive a personal copy of the SQL Server Bible.*

### Course Objectives

On completing this course, delegates will be able to:

- Explain the reasons for SQL
- Understand relational databases, in theory and practice
- Write SQL statements to query relational databases
- Write SQL statements to insert, modify or delete records
- Understand how to join multiple tables and why this is necessary.
- Be familiar with the various forms of the SQL Query
- Use SQL to protect the database from incorrect updates
- Be able to define Views
- Understand the use of Data Control Language
- Use Access to connect to RDBMS.
- Understand the basic DBA functions for an RDBMS
- Understand how to monitor the performance of Queries

- Understand why T-SQL is necessary
- Be able to design and debug T-SQL Stored procedures
- Understand the purpose and capabilities of Triggers in MS SQL Server
- Be able to design and program Triggers to protect the integrity of the database.

### Audience

- Management wanting to familiarize themselves with database technology
- Users needing to extend their knowledge of modern relational databases
- Professional staff needing to understand the latest SQL standards.
- Staff who are cross training into an IT career.

### Prerequisites

- The need to access data from a relational database
- Experience with accurate entry of information into PCs.
- The course is designed to take users at all levels of experience to a competent level of SQL knowledge.

### Timetable

Register at 09:00 for 09:30 start.  
Finish at 17:00.

### Presentation Style

Lectures, demonstrations, exercises and group discussions.

### Dates and Venues

Refer to *Course Schedules*.

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## Intermediate SQL

<p>The course covers:</p> <ul style="list-style-type: none"><li>📁 Overview of relational databases</li><li>📁 Components of relational databases</li><li>📁 Primary and foreign keys</li><li>📁 Principles of relational table design</li><li>📁 Background to SQL</li><li>📁 Components of SQL</li><li>📁 Versions of SQL</li><li>📁 Structure of relational Databases</li><li>📁 SQL Query statements</li><li>📁 SQL data modification statements</li><li>📁 SQL functions and their use</li><li>📁 SQL table create / modify statements</li><li>📁 SQL used to filter, modify, sort and group query data</li><li>📁 Views, what they are and how to create them</li><li>📁 Data Control Language, to manage privileges, access rights and schemas.</li></ul>	<ul style="list-style-type: none"><li>📁 Basic DBA functions, such as user management, backup and recovery, user authorizations</li><li>📁 Use of Access to work with relational databases such as Microsoft SQL-Server, Oracle or MySQL</li><li>📁 Understand why T-SQL is necessary</li><li>📁 Be able to design and debug T-SQL Stored procedures</li><li>📁 Understand the purpose and capabilities of Triggers in MS SQL Server</li><li>📁 Be able to design and program Triggers to protect the integrity of the database</li></ul>	
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