



**Aspect Training**

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YOUR COURSE, YOUR WAY - MORE EFFECTIVE IT TRAINING

## **SQL Introduction / Intermediate**

**Duration: 3 days**

### **Overview:**

Aspect's Introduction to T-SQL for SQL Server training class teaches attendees the T-SQL and SQL Server skills they need to develop queries and data reports using SQL..

Aspect Training's course will enable delegates to:

â€¢ Understand how SQL Server works

â€¢ Learn to select the required records

â€¢ Learn to use SQL to output reports with SQL Server

### **Prerequisites:**

This course can be adapted to any level of prior SQL Server and relational database experience.

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### **Topics:**

#### **1 - Relational Databases**

Tables

Rows

Columns

Relationships

Datatypes

Primary Keys

Foreign Keys

Relational Database Management System

#### **2 - SQL Statements**

Database Manipulation Language (DML)

Database Definition Language (DDL)

Database Control Language (DCL)

#### **3 - Some Basics**

Comments

Whitespace and Semi-colons

Case Sensitivity

#### **4 - Selecting Records**

Simple SELECTs with SQL Server

SELECTing All Columns in All Rows

Exploring the Tables

SELECTing Specific Columns

#### **5 - Sorting Records**

Sorting By a Single Column

Sorting By Multiple Columns

Sorting By Column Position

Ascending and Descending Sorts

#### **6 - The WHERE Clause and Operator Symbols**

Checking for Equality

Checking for Inequality

Checking for Greater or Less Than

Checking for NULL

WHERE and ORDER BY

#### **7 - The WHERE Clause and Operator Words**

The BETWEEN Operator

The IN Operator

The LIKE Operator

The NOT Operator

#### **8 - Checking Multiple Conditions**

AND

OR

Order of Evaluation

Writing SELECTs with Multiple Conditions

#### **9 - Advanced SELECTs with SQL**

Calculated Fields

Concatenation

Mathematical Calculations

Aliases

## **10 - Aggregate Functions and Grouping**

Aggregate Functions

Grouping Data

## **11 - Built-in Data Manipulation Functions**

Common Math Functions

Common String Functions

Common Date Functions

## **12 - Subqueries, Joins, and Unions Subqueries**

Joins

Table Aliases

Multi-table Joins

Outer Joins

Unions

UNION ALL

UNION Rules