



Microsoft SQL Training

SQL Essentials

Why SQL?

Structured Query Language or SQL is a widely used programming language for requesting information, updating, deleting, calculating and manipulating data from relational database management systems (RDBMS). With SQL you can access and modify data using simple queries and commands. SQL skills are highly sought after in a variety of fields, including but not limited to, Web development, Database development, Data analysis and testing, programming, among others.

Duration: 2 days

Class size: 10 students max

Times: 9:00am - 5:00pm

Price: Refer to our website for current course and package pricing

After the course?

Each student will receive:

- Certificate of completion
- Training manual
- 12 months FREE email support
- FREE class re-sit (if necessary)

About The Course

During this 2-day Microsoft SQL course you will learn how to develop skills in the use of Structured Query Language. Upon completion of this SQL course will be used to create, populate and manipulate databases as well as to retrieve data in a variety of ways. This training course will teach you the parts of SQL you need to know starting with simple data retrieval and quickly going on to more complex topics including the use of joins, subqueries, views and stored procedures.

Who Should Do This Course?

This course is suitable for anyone who want to learn fundamentals of SQL database programming language and gain an understanding of Data management.

Prerequisites

This course assumes no prior knowledge of Microsoft SQL however a general understanding of personal computers and the Windows operating system is required.

Content

Unit 1: Understanding SQL

- Database Basics
- Introduction to SQL

Unit 2: Retrieving Data

- The SELECT Statement
- Retrieving Individual Columns
- Retrieving Multiple Columns
- Retrieving All Columns

- Retrieving Distinct Rows
- Limiting Results
- Using Comments

Unit 3: Sorting Retrieved Data

- Sorting Data
- Sorting by Multiple Columns
- Sorting by Column Position
- Specifying Sort Direction

Unit 4: Filtering Data

- Using the WHERE Clause
- The WHERE Clause Operators

Unit 5: Advanced Data Filtering

- Combining WHERE Clauses
- Using the IN Operator
- Using the NOT Operator

Unit 6: Using Wildcard Filtering

- Using the LIKE Operator
- Tips for Using Wildcards

Unit 7: Creating Calculated Fields

- Understanding Calculated Fields
- Concatenating Fields
- Performing Mathematical Calculations

Unit 8: Using Data Manipulation Functions

- Understanding Functions
- Using Functions

Unit 9: Summarising Data

- Using Aggregate Functions
- Aggregates on Distinct Values
- Combining Aggregate Functions

Unit 10: Grouping Data

- Understanding Data Grouping
- Creating Groups
- Filtering Groups
- Grouping and Sorting
- SELECT Clause Ordering

Unit 11: Working with Subqueries

- Understanding Subqueries
- Filtering by Subquery
- Using Subqueries as Calculated Fields

Unit 12: Joining Tables

- Understanding Joins
- Creating a Join

Unit 13: Creating Advanced Joins

- Using Table Aliases
- Using Different Join Types
- Using Joins with Aggregate Functions
- Using Joins and Join Conditions

Unit 14: Combining Queries

- Understanding Combined Queries
- Creating Combined Queries

Unit 15: Inserting Data

- Understanding Data Insertion
- Copying from One Table to Another

Unit 16: Updating and Deleting Data

- Updating Data
- Deleting Data
- Guidelines for Updating and Deleting Data

Unit 17: Creating and Manipulating Tables

- Creating Tables
- Updating Tables
- Deleting Tables
- Renaming Tables

Unit 18: Using Views

- Understanding Views
- Creating Views

Unit 19: Working with Stored Procedures

- Understanding Stored Procedures
- Why to Use Stored Procedures
- Executing Stored Procedures
- Creating Stored Procedures

Unit 20: Managing Transaction Processing

- Understanding Transaction Processing
- Controlling Transactions