

# Microsoft SQL Server Training Course

## Microsoft SQL Server Training Details

**Duration: 25-30 hours**

**Type: Online Training**

**Includes: Course Material**

Microsoft SQL Server is a relational database server, developed by Microsoft, it is a software product whose primary function is to store and retrieve data as requested by other software applications, be it those on the same computer or those running on another computer across a network.

- Training by Realtime Expert trainer
- Live Online Classes
- Free study material
- Online virtual Classes available in morning, evening and weekend

## Prerequisites

- Attendees must have basic computer knowledge.

## Duration

### Online

- The format is 40% theory, 60% Hands-on.
- It is a 20 days program and extends up to 2hrs each.

### Corporate

- The format is 40% theory, 60% Hands-on.
- It is a 5 days program and extends up to 8hrs each.

### Classroom

- Private Classroom arranged on request and minimum attendees for batch is 4.

## **Course Content**

### **Introducing SQL Server 2008**

- What's New in SQL Server?
- SQL Server Editions
- Installing SQL Server

### **Basics of Database Design**

- Normalization
- Denormalization
- Tools for Normalization in SQL Server
- Introducing SQL Server Management Studio
- Creating a Database
- Adding Tables
- Creating Indexes and Constraints
- Building Relations

### **T-SQL Basics**

- What is T-SQL?
- Syntax Conventions
- Introducing AdventureWorks2008
- Executing SQL Statements
- Identifiers
- Creating Data Types
- Operators
- Variables
- Functions
- Using T-SQL to Build and Alter Objects

### **SELECT Queries**

- The SELECT Clause
- The FROM Clause
- The WHERE Clause
- The ORDER BY Clause
- Using GROUP BY and HAVING
- Using TOP N and TOP N PERCENT
- UNION Queries
- Full-Text Search

## Action Queries

- SELECT INTO queries
- DELETE queries
- TRUNCATE TABLE queries
- INSERT queries
- UPDATE queries
- MERGE queries

## Locking and Execution Plans

- What is Locking?
- Monitoring Locks
- Tuning Locking
- Deadlocks
- Tuning Queries
- Management Data Warehouse
- Performance Studio

## Views, Stored Procedures, and Functions

- Using Views
- Using Stored Procedures
- Using Functions

## Advanced Transact-SQL

- Transactions
- Rowset Functions
- Ranking Functions
- Cursors
- Structured Error Handling

## XML and SQL Server

- XML Columns and Indexes
- Querying and Modifying XML Data
- Using OPENXML
- Using FOR XML

## Triggers

- Creating DML Triggers
- Altering DML Triggers

- Using the Inserted and Deleted Tables
- Checking Updated Columns
- Recursive and Nested Triggers
- Creating DDL Triggers

### **.NET inside of SQL Server**

- Creating CLR User-Defined Functions
- Creating CLR Stored Procedures
- Using the Sql Namespace
- Creating CLR Triggers
- Creating CLR User-Defined Types
- Choosing When To Use CLR Objects

### **SMO and RMO Programming**

- Retrieving Server Information
- Working With Database Objects
- Generating Scripts
- Viewing and Modifying Server Configuration
- Understanding RMO

### **Data Protection/Tracking**

- Understanding Change Data Capture
- Data Capture Schema and Tables
- Transparent Data Encryption