MS SQL Server- Development

Duration: 50-55 Hours

Prerequisites

- There are no pre-requisites for this course.
- Familiar with any database concept is advantageous.

Course Contents

1. Database Overview

- Overview of Database
- Components of Database System
- Advantages of Database
- RDBMS Concepts
- Table, Record, Field, Column
- Overview of DDL,DML,DCL

2. Working with SQL Server Management Studio

- Management Studio Work Area
- Creating Tables
- View Data
- SQL Select Statement
- SQL Data Types

3. Restricting and Sorting Data

- Where Clause
- Logical Operators
- AND, OR Operators
- Arithmetic Operator
- Comparison Operator
- Logical Operators
- IN & Between Operator

4. SQL Functions

- AVG
- MAX,MIN
- SUM etc

5. Aggregating Data Using Group Functions

- Group Functions
- Group By Clause
- HAVING Clause

6. Subqueries

- Single Row Subqueries
- Multiple Row Subqueries
- Correlated Subqueries

7. Manipulating Data

- INSERT Statement
- UPDATE Statement
- DELETE Statement
- MERGE Statement

8. SQL Joins

- Inner Join
- Left Join
- Right Join
- Full Outer Join

9. Transact-SQL Programming

- Introduction to T-SOL
- Programming Elements
- Control Statement in TSQL
- Looping Structure

10. Cursors

- Basics of Cursor
- LifeCycle of Cursor
- Types Of Cursors
- Forward_Only and Scroll Cursors
- Static, Dynamic and Keyset Cursors
- Local and Global Cursors

11. Transaction and Error Handling

- Transactions and the Database Engine
- Controlling Transactions
- Isolation Levels
- TRY / CATCH Blocks
- Working with Error Information

12. Stored Procedures

- Querying Data with Stored Procedures
- Passing Parameters to Stored Procedures
- Creating Simple Stored Procedures
- Working with Dynamic SQL

13. User Defined Functions

- Creating and Altering Functions
- Types Of User Defined Functions
- Scalar Functions
- Inline Table-Valued
- Multi-statement Table-Valued
- Permissions On User Defined Functions

14. Triggers

- Create Trigger
- Types of Trigger
- After Triggers
- Instead Of Triggers