



# Rising Technology

## SQL Server 2012/2016 Syllabus

### **Introducing SQL Server 2012**

- What is SQL Server
- SQL Server Editions
- Installing SQL Server
- Sql Server Instances
- Internals of Sql Server Database
- MDF & LDF Files

### **Basics of Database Design**

- Normalization
- Demoralization
- Introducing SQL Server Management Studio
- Creating a Database
- Data Types
- Creating Tables
- Alteration of Table Design
- Drop Table

### **Constraint in SQL SERVER**

- What is Constraint
- Adding constraints to columns in Tables
- Primary Key Constraints
- Unique Constraints
- Check Constraints
- Default
- Foreign Constraints
- Alter Constraints
- Drop Constraints
- Creating Relational Database

## JOINS IN SQL SERVER

- Introduction to Joins
- Types of Joins
- Inner Join.
- Left Outer Join
- Right Outer Join
- Full Outer Join
- Self Join
- Writing Joins queries

## Writing Queries

- INSERT queries
- UPDATE queries
- DELETE queries
- TRUNCATE
- The SELECT Clause The FROM Clause
- The WHERE Clause Mathematical Operator
- Conditional Operators
- AND, OR Operators
- • Like Operators
- .The ORDER BY Clause
- Aggregate Functions
- String Functions
- Date Functions Using GROUP BY and HAVING
- Using TOP N and TOP N PERCENT
- SELECT INTO queries
- SUB-QUERIES
- UNION
- CTE

## T-SQL, Stored Procedures, Functions

- What is T-SQL?
- Syntax Conventions
- Executing SQL Statements
- Identifiers
- Operators
- Variables Using T-SQL to Build and Alter Objects
- If-else statements
- Case statements
- Looping statements
- Identity statements
- Introduction to Stored Procedures

- Writing Stored Procedures
- Using Input & Output Parameters
- Introduction to Stored Procedures Types of functions
- Writing Functions

### **Triggers**

- Creating DML Triggers
- Altering DML Triggers
- Using the Inserted and Deleted Tables
- Auditing Data using Triggers

### **Advanced SQL-SERVER**

- Temporary Tables
- Error Handling
- Transactions
- Authentication Modes in SQL SERVER
- Creating Users
- Backup & Restore
- Email configuration in SQL SERVER
- Creating Operators
- Automating Tasks using Jobs