

Microsoft-SQLServer

- **Basic Database Concepts**
 - Concepts of Data, Metadata, Files
 - Concepts of DBMS
 - Database Models
 - File Management Systems
 - Relational Database systems
 - Codd's Rules
- **Normalization**
 - First Normal Form
 - Second Normal Form
 - Third Normal Form
- **Introduction to SQL server**
 - Features of SQL server
 - Different Editions of SQL server
 - Components of SQL server
 - Services of SQL server
- **Management Studio**
 - Basics of SQL
 - Datatypes, expressions, operators
 - Working with queries & Clauses
 - Creating databases,
 - Creating tables, stored procedures
 - Working with Indexes & Views
- **Sub queries**
 - Nested sub queries
 - Correlated sub queries
 - Derived tables
- **Implementation of Data integrity**
 - Referential integrity
 - Types of constraints
- **Data Definition Language (DDL)**
 - Creation of table
 - Modifying the structure of a table
 - Dropping a table
 - Working with different options
- **Data Manipulation Language (DML)**
 - Inserting, updating & deleting operations
 - Operators, Built-in functions, Grouping
 - Working with multiple tables
- **Joins**
 - Introduction to Joins
 - Inner join
 - Outer join
 - Cross joins
 - Unions

- **Working with Indexes**
 - Introduction to indexes
 - Creating, dropping indexes
 - Clustered & non clustered indexes
- **Implementing Views**
 - Introduction & advantages of views
 - creating views
 - altering, dropping views
- **Transact-SQL (T-SQL)**
 - Introduction
 - Data types
 - Statements
 - Batch Execution
- **Working with Cursors**
 - Creating Cursors
 - Cursors vs. Select
 - Types of cursors
- **Implementing Stored Procedures**
 - Introduction to stored procedures
 - creating, executing, modifying , dropping sp's
 - user defined, system defined sp's
 - Executing extended sp's
- **Implementing User Defined Functions**
 - Introduction ,creating ,altering & dropping UDF's
 - scalar, multistatement, built-in functions
- **Implementing Triggers**
 - Introduction to triggers
 - Constraints vs triggers
 - Creating, altering, dropping triggers
 - for/after/instead of triggers