
Basic SQL – 35 Academic Hours

Course Overview:

The Basic SQL Baseline course provides a solid and practical foundation for working with SQL to query, manipulate, and analyze data from relational databases. Participants learn how to understand data structures and table relationships, write clear and efficient queries, filter, sort, and combine datasets, and apply scalar and aggregate functions for calculations, text handling, and date/time operations. The course emphasizes hands-on practice using real-world business scenarios, enabling learners to work independently with data and support data-driven decision-making processes.

What Participants Gain?

Graduates leave the course with practical, day-to-day SQL proficiency: writing complex queries across multiple tables, applying advanced filtering and sorting, using scalar and aggregate functions to compute metrics, implementing business logic with CASE statements, and handling missing data with ISNULL/COALESCE. They are also able to leverage subqueries and derived tables for more advanced logic, perform basic DML operations, and prepare clean, structured datasets for downstream use in BI tools, reports, and analytics workflows. The skills gained enable graduates to work independently with databases in real organizational contexts and contribute effectively to data-driven projects.

Target Audience

- Junior data analysts
- BI and data professionals
- Finance, marketing, and operations professionals working with data
- Junior developers who need to work with databases
- Professionals seeking a solid SQL foundation

Prerequisites

- Basic computer literacy and familiarity with office tools
- Basic understanding of data concepts and tabular structures
- Logical thinking and comfort working with data
- No prior SQL experience required

Course Syllabus

- Getting to know your Data
- Basic Select
- Where Statement
- Order By
- Scalar Functions
 - Math functions
 - Text functions
 - Date & Time functions
 - Conversion Functions
- Isnull & Coalesce
- Case Statement
 - Simple Case
 - Advanced Case
- Group Functions
- Having
- Join
 - Inner Join
 - Outer Joins
- Union
- Excpt
- Intersect
- Sub Query
- Derived Tables
- DML