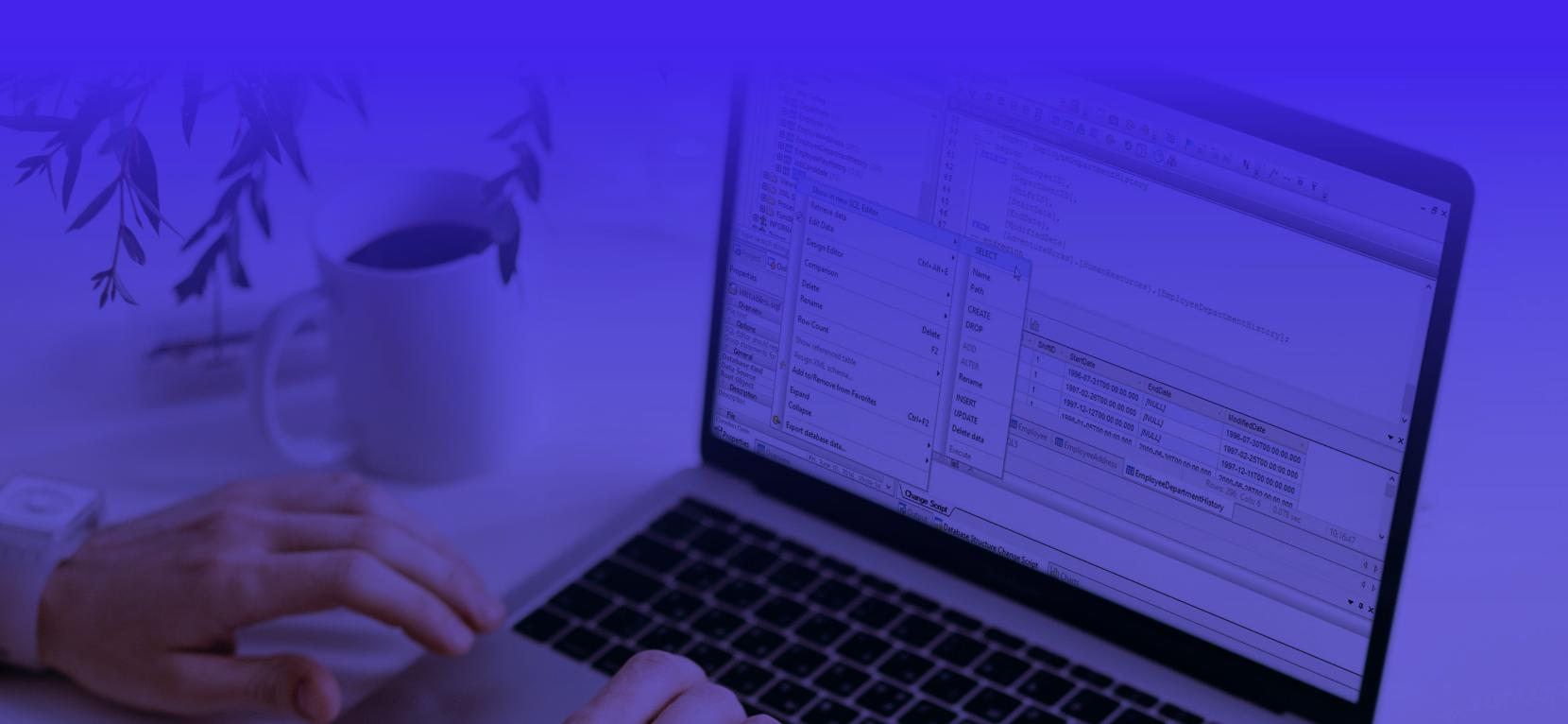


SQL Server For Data Analyst





Introduction

SQL Server is a powerful and flexible tool for ETL processes, allowing you to create sophisticated data analysis solutions. It facilitates the construction of dynamic data cubes, advanced analysis with real-time tabular models, and the efficient execution of complex queries using languages like MDX and DAX, providing deep and detailed analysis.



Prerequisites

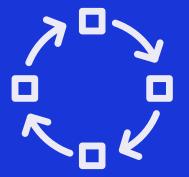
- No prior programming experience is required.
- Basic knowledge of Excel or data handling (is a plus, but not mandatory).

Objectives

- Facilitate the extraction, transformation, and loading of data from various sources, saving time and reducing errors.
- Efficiently manage massive and complex data.
- Connect to a wide variety of data sources and systems, allowing smooth and effective integration.



Methodology



Synchronous sessions based on practical cases (real cases).

Duration



The course has a duration of 32 chronological hours (40 academic hours).

Benefits



Internationally Valid Certification.



Recognized Data and Analytics Specialist Instructors and Consultants.



Support, guidance, and development for students.



Syllabus

Topic 1

SQL Language

- Create, modify, and delete tables.
- Create primary and foreign keys.
- Create relationships between tables.

Topic 2

Introduction to SQL Queries

- Basic structure of a query.
- Use of operators.
 Queries: Like, between,
 in, not, and others.
- Top, Top With, DISTINCT.
- Order by.

Topic 3

SQL Functions

- Date functions.
- String functions.
- Numeric functions.
- Subqueries.

Topic 4

Advanced Queries

- Inner Join, Left Outer Join, Right Outer Join, Full Join.
- Data grouping and summaries.
- Aggregation functions:
 COUNT, SUM, MAX, MIN,
 AVG.
- Group By/Having.
- Union.

Topic 5

Procedures and Functions

- Create, modify, delete, and execute Stored Procedures.
- Create, modify, delete, and execute
 User-Defined
 Functions.
- Create, modify, delete, and execute Views.

Topic 6

T-SQL Language

- Programming structures.
- If...Else. Case.
 While, Break, and
 Continue.
- Try...Catch.



Programming in TRANSACT:

Topic 1

- Varibles
 Local and global variables
 Temporary table types in
- SQL Server
- CTE
- Table variable
- Temporary table
 Conditional Structure

Topic 3

- IF-ELSE-WHILE
- User-Defined Functions
- Merge Into

Topic 2

- Flow Functions
- Control
- structures if..else
- Control structure while
- try.catch

Topic 4

- Stored Procedures
- Jobs with SQL Agent
- Sending email with SQL Database Mail

