

# Sela.

2778A

## Writing Queries Using Microsoft SQL Server 2008 Transact-SQL

college@sela.co.il

03-6176666





# Writing Queries Using Microsoft SQL Server 2008 Transact-SQL

2778A - Version: 1

 3 days Course

## Description:

This 3-day instructor led course provides students with the technical skills required to write basic Transact-SQL queries for Microsoft SQL Server 2008.

## Intended audience:

This course is intended for SQL Server database administrators, implementers, system engineers, and developers who are responsible for writing queries.

## Prerequisites:

Knowledge of data integrity concepts.  
Core Windows Server skills.  
Relational database design skills.  
Programming skills.

## Objectives:

Describe the uses of and ways to execute the Transact-SQL language.  
Use querying tool.  
Write SELECT queries to retrieve data.  
Group and summarize data by using Transact-SQL.



Join data from multiple tables.

Write queries that retrieve and modify data by using subqueries.

Modify data in tables.

Query text fields with full-text search.

Describe how to create programming objects.

Use various techniques when working with complex queries.

## Topics:

### Module 1: Getting Started with Databases and Transact-SQL in SQL Server 2008

- Overview of SQL Server 2008
- Overview of SQL Server Databases
- Overview and Syntax Elements of T-SQL
- Working with T-SQL Scripts
- Using T-SQL Querying Tools
- Lab : Using SQL Server Management Studio and SQLCMD

### Module 2: Querying and Filtering Data

- Using the SELECT Statement
- Filtering Data
- Working with NULL Values
- Formatting Result Sets
- Performance Considerations for Writing Queries
- Lab : Querying and Filtering Data

### Module 3: Grouping and Summarizing Data



- Summarizing Data by Using Aggregate Functions
- Summarizing Grouped Data
- Ranking Grouped Data
- Creating Crosstab Queries
- Lab : Grouping and Summarizing Data

## Module 4: Joining Data from Multiple Tables

- Querying Multiple Tables by Using Joins
- Applying Joins for Typical Reporting Needs
- Combining and Limiting Result Set
- Lab : Joining Data from Multiple Tables

## Module 5: Working with Subqueries

- Writing Basic Subqueries
- Writing Correlated Subqueries
- Comparing Subqueries with Joins and Temporary Tables
- Using Common Table Expressions
- Lab : Working with Subqueries

## Module 6: Modifying Data in Tables

- Inserting Data into Tables
- Deleting Data from Tables
- Updating Data in Tables
- Overview of Transactions
- Lab : Modifying Data in Tables

## Module 7: Querying Metadata, XML, and Full-Text Indexes



- Querying Metadata
- Overview of XML
- Querying XML Data
- Overview of Full-Text Indexes
- Querying Full-Text Indexes
- Lab : Querying Metadata, XML, and Full-Text Indexes

## Module 8: Using Programming Objects for Data Retrieval

- Overview of Views
- Overview of User-Defined Functions
- Overview of Stored Procedures
- Overview of Triggers
- Writing Distributed Queries
- Lab : Using Programming Objects for Data Retrieval

## Module 9: Using Advanced Querying Techniques

- Considerations for Querying Data
- Working with Data Types
- Cursors and Set-Based Queries
- Dynamic SQL
- Maintaining Query Files
- Lab : Using Advanced Querying Techniques