

**Introduction to SQL Server 2022 for Query Writers**

**Course Number:** SQL-500
**Duration:** 3 days

**Overview**

Accelebrate's SQL Server 2022 for Query Writers Training teaches attendees the skills they need to query and modify data in SQL Server successfully.

**Prerequisites**

No prior experience is presumed.

**Materials**

All SQL Server students receive a copy of Murach’s *SQL Server 2022 for Developers.*

**Software Needed on Each Student PC**

Attendees will not need to install any software on their computer for this class. The class will be conducted in a remote environment that Accelebrate will provide; students will only need a local computer with a web browser and a stable Internet connection. Any recent version of Microsoft Edge, Mozilla Firefox, or Google Chrome will be fine.

**Objectives**

* Understand the basics of relational databases and SQL
* Retrieve data from a single table and multiple tables
* Write summary queries and subqueries

**Outline**

* Introduction to Relational Databases and SQL
	+ An introduction to client/server systems
	+ An introduction to the relational database model
	+ An introduction to SQL and SQL-based systems
	+ The Transact-SQL statements
* Using Management Studio
	+ An introduction to SQL Server 2022
	+ An introduction to Management Studio
	+ How to view and modify the database
	+ How to work with queries
	+ How to view the documentation for SQL Server
* Retrieving Data from a Single Table
	+ An introduction to the SELECT statement
	+ How to code the SELECT clause
	+ How to code the WHERE clause
	+ How to code the ORDER BY clause
* Retrieving Data from Two or More Tables
	+ How to work with inner joins
	+ How to work with outer joins
	+ Other skills for working with joins
	+ How to work with unions
* Coding Summary Queries
	+ How to work with aggregate functions
	+ How to group and summarize data
	+ How to summarize data using SQL Server extensions
* Coding Subqueries
	+ An introduction to subqueries
	+ How to code subqueries in search conditions
	+ Other ways to use subqueries
	+ Guidelines for working with complex queries
	+ How to work with common table expressions
* Inserting, Updating, and Deleting Data
	+ How to create test tables
	+ How to insert new rows
	+ How to modify existing rows
	+ How to delete existing rows
	+ How to merge rows
* Working with Data Types
	+ A review of the SQL data types
	+ How to convert data
* Using Functions
	+ How to work with string data
	+ How to work with numeric data
	+ How to work with date/time data
	+ Other functions you should know about
* Conclusion