

**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