

Querying Microsoft SQL Server 2014 (20461)

Duration: **5 days**

Course Overview

This 5-day instructor led course provides students with the technical skills required to write basic Transact-SQL queries for Microsoft SQL Server 2014. This course is the foundation for all SQL Server-related disciplines; namely, Database Administration, Database Development and Business Intelligence. The main purpose of the course is to prepare people for the exam "70-461: Writing Queries Using Microsoft® SQL Server® 2014 Transact-SQL." This exam will be the underlying exam for all SQL Server-related disciplines; namely, Database Administration, Database Development and Business Intelligence. As such, the primary target audience for this course is: Database Administrators, Database Developers and BI professionals..

Note: This course is designed for customers who are interested in learning SQL Server 2012 or SQL Server 2014. It covers the new features in SQL Server 2014, but also the important capabilities across the SQL Server data platform.

Who should attend

This course is intended for Database Administrators, Database Developers, and Business Intelligence professionals. The course will very likely be well attended by SQL power users who aren't necessarily database-focused or plan on taking the exam; namely, report writers, business analysts and client application developers.

Prerequisites

1. Working knowledge of relational databases.
2. Basic knowledge of the Microsoft Windows operating system and its core functionality

Course Objectives

After completing this course, students will be able to:

1. Describe the basic architecture and concepts of Microsoft SQL Server 2014.
2. Understand the similarities and differences between Transact-SQL and other computer languages.
3. Write SELECT queries
4. Query multiple tables
5. Sort and filter data
6. Describe the use of data types in SQL Server
7. Modify data using Transact-SQL
8. Use built-in functions
9. Group and aggregate data

10. Use subqueries
11. Use table expressions
12. Use set operators
13. Use window ranking, offset and aggregate functions
14. Implement pivoting and grouping sets
15. Execute stored procedures
16. Program with T-SQL
17. Implement error handling
18. Implement transactions

Follow On Courses

1. [Administering Microsoft SQL Server 2014 Databases](#) (20462)
2. [Implementing a Data Warehouse with Microsoft SQL Server](#) (20463)

Course Content

1. Introduction to Microsoft SQL Server 2014
2. Introduction to T-SQL Querying
3. Writing SELECT Queries
4. Querying Multiple Tables
5. Sorting and Filtering Data
6. Working with SQL Server 2014 Data Types
7. Using DML to Modify Data
8. Using Built-In Functions
9. Grouping and Aggregating Data
10. Using Subqueries
11. Using Table Expressions
12. Using Set Operators
13. Using Window Ranking, Offset, and Aggregate Functions
14. Pivoting and Grouping Sets
15. Querying data with Stored Procedures
16. Programming with T-SQL
17. Implementing Error Handling
18. Implementing Transactions
19. Appendix 1: Improving Query Performance
20. Appendix 2: Querying SQL Server Metadata