

SQL Programming Fundamentals: Querying, Database Design & Administration

Applied Technology Academy

A three-day introduction to SQL in its T-SQL form, combining query fundamentals with the database design and administration skills that make those queries hold up. Participants write queries against real tables, then work through relational design, tables and constraints, indexes and views, data manipulation, transactions, access control and the security foundations every database needs. Suitable for anyone who has to get reliable answers out of a relational database.

LEVEL	DURATION	DELIVERY
Introductory	3 Days	Instructor-led

Course Overview

- Three days, instructor-led, hands-on against a working database.
- T-SQL edition: the syntax and tooling are Microsoft SQL Server's.
- Combines querying with design and administration rather than treating them separately.
- Includes the security foundations - access control, permissions and safe data handling.

Prerequisites

- No prior SQL experience is required.
- General familiarity with data in spreadsheets or business systems is helpful.
- No programming background is assumed.

Who Should Attend

- Analysts and report writers who need more than a query builder.
- Developers working against relational databases.
- IT staff taking on database responsibilities.
- Anyone moving from spreadsheets to a real database.

What the Course Covers

In scope:

- query fundamentals - selecting, filtering, sorting, joining and aggregating data
- relational database design, tables and constraints
- indexes and views
- data manipulation: inserting, updating and deleting safely

- transactions and their effect on concurrent work
- access control, permissions and foundational database security

Not covered:

- advanced query tuning and execution-plan analysis, which the advanced course addresses
- full database administration, backup strategy and high availability

Next Steps

- Participants who need deeper query work continue into advanced SQL querying;
- those moving toward administration continue into SQL Server administration and Azure SQL.

Ready to enroll? Call 800.674.3550 or email Info@AppliedTechAc.com — private team cohorts, GSA MAS purchasing, military credentialing funding, VA GI Bill and VR&E and student financing available.