

36+ hours of instructor-led training!

SQL Server Programming (SQL Server 2005/2000): Transact SQL

• CourseId: 150 • Skill level: 200-500 • Run Time: 36+ hours (187 videos)

Course Description

Our online SQL Server programming course features more than 30 hours of SQL Server 2005 and SQL Server 2000 query writing, stored procedure training, and more. You'll learn the ins and outs of SQL data types, how to use and write your own functions, writing joins and subqueries, how to write triggers and stored procedures and much, much more.

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- 1 - The Development Environment - Tools, Code Generation, and More
- 2 - The T-SQL Language - An Introduction to Common Terms, Tools, and Techniques
- 3 - Table Design - Datatypes, Constraints, IDENTITY, Normalization, and More
- 4 - SELECT, INSERT, UPDATE and DELETE - Data Manipulation Language
- 5 - Aggregating Data Using DISTINCT, GROUP BY, HAVING, and more
- 6 - JOINS and UNIONS - Working with Multiple Tables
- 7 - Datatypes, Conversion, Variables, Functions, Views and more
- 8 - Performance: Index Design, Plan Guides, Execution Plans and Query Plans
- 9 - Subqueries, Nested Queries, and Derived Tables in Transact SQL
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- 13 - User-Defined Functions (UDFs) in SQL Server
- 14- Dynamic Data Source Queries - How to Write Distributed Data Queries and more
- 15- XML and SQL Server - FOR XML, SQLXML, MSXML, and More
- 16- Design Patterns for Transact-SQL
- 17- Misc Stuff That Just Doesn't Fit Anywhere Else

Pricing and Multi-User Licensing

LearnItFirst's courses are priced on a per user, per course basis. Volume discounts start for as few as five users. Please visit our website or call us at +1(877) 630-6708 for more information.

Packages and Bundles Available

This course is part of our "SQL Server 2005 Database Administrator" package. This package features four courses and a savings of 25% off the retail price ("Buy 3 Get 1 Free").

\$99.95
per user

- Purchasing this course allows you access to view and download the videos for one full year
- Course may be watched as often as necessary during that time

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Who Is This Course Designed For?

Our SQL Server Programming course is designed for the beginner-intermediate - beginners and advanced users are welcome as well yet most material is in the Level 200-300 range.

Pre-Requisites

While a true beginner could take this course, it is actually recommended that you have at least 30 days experience working with SQL Server (or equivalent work experience with another database system) prior to taking this course.

About the Instructor

Scott Whigham is the founder of LearnItFirst.com, one of the web's most extensive video training libraries focusing on technical training. Scott is also an experienced consultant, trainer, and author with more than a decade of hands-on experience working with SQL Server databases, writing and debugging applications using Visual Studio, and performance tuning. Scott designed the architecture (websites, class libraries, and database) for the LearnItFirst.com websites and, most recently, was involved in upgrading the websites and support applications from Visual Studio 2005 to Visual Studio 2008 and to SQL Server 2008.



Before founding LearnItFirst, Scott had been an independent consultant since 1998 focusing on SQL Server and .NET performance tuning and data warehousing. Scott has been asked to speak and train at events in the United States and Europe. As an author, Scott has written courses on SQL Server and C# and VB languages as well as popular articles for top-selling magazines and the MSDN (Microsoft Developer Network) library.

Frequently Asked Questions

- "How do I access the videos?" You can access the videos 24/7 online via our website
- "Do I have to have internet access to watch the videos?" No! Users can download the videos to their hard drive.
- "How long are the videos?" The videos are broken into 10 minute task-oriented segments designed to teach you a single task
- "How many videos are in a course?" It depends on the topic; courses can have anywhere from 20 - 200 videos!

For More Details

Visit <http://www.learnitfirst.com/Course/150/SQL-2005-Programming.aspx> for more information and to watch free sample videos from this course.

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Videos in this course:

Chapter 1: The Development Environment - Tools & Code Generation

Viewed?

- 1.1 - Creating Database Diagrams in SQL Server Management Studio
- 1.2 - How to Upgrade The Documentation of SQL Server 2005 (Books Online)
- 1.3 - Templates in SQL Server Management Studio - What They Are and How to Use Them
- 1.4 - Interactive Help and Books Online - Using Context-Sensitive Help (SQL Server 2000)
- 1.5 - Rapid Database Development Using Database Diagrams (SQL Server 2000)
- 1.6 - How to Get the Most Out of SSMS: Understanding the Tabbed Environment
- 1.7 - Pt. 1 - An Introduction to SQL Server Management Studio (SSMS)
- 1.8 - Pt. 2 - SQL Server Management Studio (SSMS) Functionality and Available Options
- 1.9 - Pt. 3 - Changing Table Design and Properties; Using the Query Designer in SSMS
- 1.10 - Pt. 4 - Viewing Reports; Configuring and Viewing the SQL Server and Windows Application Event Log
- 1.11 - Pt. 1 - Installation and Configuration of the SQL Server 2005 Sample Applications
- 1.12 - Pt. 2 - More Samples and How to Get the Sample Applications to Compile Using an .snk File

Chapter 2: The T-SQL Language

- 2.1 - Database Diagrams - An Introduction
- 2.2 - An Overview of the AdventureWorksDW Database
- 2.3 - An Overview of the Northwind Database
- 2.4 - COLLATE and How Queries and Table Data Work with Case-Sensitive and Accent-Sensitive Data
- 2.5 - Model Database - An Overview of How to Use It and When to Use It (SQL Server 2005)
- 2.6 - TempDb Database - An Overview of How it Works and When to Use It
- 2.7 - Constraint Keys, Index Keys, Composite Keys, Natural keys, and Surrogate Keys
- 2.8 - Resultsets, Recordsets, and the Client Server model (SQL Server 2000)
- 2.9 - Scalar, System, Built-In and Niladic Functions - What They Are and How to Use Them
- 2.10 - SQL Standards - ISO, ANSI, and Transact-SQL's Implementation of the Various Standards

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Videos in this course:(cont.):

Chapter 2: The T-SQL Language

Viewed?

- 2.11 - SQL Server Internals - The Steps SQL Server Goes Through to Run a Command
- 2.12 - Part 1 - An Overview of the AdventureWorks Database
- 2.13 - Part 2 - An Overview of the AdventureWorks Database - Database Diagrams and DDL Triggers
- 2.14 - Pt. 1 - An Intro to Schemas In SQL Server 2005 and SQL Server 2008
- 2.15 - Pt. 2 - Default Schemas and How SQL Server Performs Naming Resolution
- 2.16 - Pt. 3 - Best Practices for Using Schemas and How to Transfer Objects to New Schema

Chapter 3: Table Design - Datatypes, Constraints, IDENTITY, and More

- 3.1 - Auto-Numbering Rows with IDENTITY Columns - How Identity Columns Work
- 3.2 - Collations, Character Sets, Code Pages, and Sort Orders - How String Data Works in SQL Server 2000
- 3.3 - How to Return Identity Value for a Just-Inserted Row
- 3.4 - Naming Conventions for SQL Server Tables Constraints and Indexes (SQL Server 2000)
- 3.5 - Should I use a Check Constraint or a Foreign Key - Best Practices and Design (SQL Server 2000)
- 3.6 - Using Defaults to Avoid Using NULLS in Your Database (SQL Server 2000)
- 3.7 - Why You Use SCOPE_IDENTITY() Instead of @@IDENTITY
- 3.8 - Working with User Defined Data Types in the Enterprise Manager (SQL Server 2000)
- 3.9 - What Are Computed Columns (a.k.a. Derived Fields)? When Should I Use Them?
- 3.10 - Part 1 - Identity Columns - When Should I Use an Identity Column?
- 3.11 - Part 2 - Identity Columns - When Should I Use an Identity Column?
- 3.12 - 01 - An Introduction to Datatype Conversion
- 3.13 - 02 - Implicit Datatype Conversion and How SQL Server Converts Data in Expressions
- 3.14 - 03 - More on Datatype Conversions with ISNUMERIC and ISDATE
- 3.15 - 04 - Working With Decimal-Based Datatypes: MONEY, DECIMAL, FLOAT, et al
- 3.16 - 05 - Working With Integer Data

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Videos in this course:(cont.):

Chapter 3: Table Design - Datatypes, Constraints, IDENTITY, and More

Viewed?

3.17 - 06 - Explicit Datatype Conversion Using CAST and CONVERT

3.18 - 07 - More on Using CAST and CONVERT to Do Datatype Conversion

3.19 - 08 - Understanding Datatype Precedence in Implicit Conversions

3.20 - 09 - Best Practices, Writing CASE Statements, and Final Thoughts

3.21 - 10 - Final, Final Thoughts

Chapter 4: Data Manipulation Language

4.1 - How to Add In a Row Number Column That Numbers the Rows of Your Result Set

4.2 - What Is Modulo? When Would I Use It?

4.3 - Pt. 1 - An Overview of the SELECT Statement: Clauses and Sequence

4.4 - Pt. 2 - Using the SELECT Statement With and Without a FROM Clause

4.5 - Pt. 3 - Writing WHERE Clauses and Filtering Your Data

4.6 - Pt. 4 - Complex WHERE Clauses Using AND, OR, and Parentheses

4.7 - Pt. 5 - When to Use GROUP BY, DISTINCT, and An Overview of Aggregates in SQL

4.8 - Pt. 6 - Using HAVING and GROUP BY

4.9 - Pt. 7 - Column Aliases, TOP, and ORDER BY

4.10 - Pt. 1 - An Overview of the INSERT Statement in Transact SQL

4.11 - Pt. 2 - Discussion of the Various Syntaxes for the INSERT Statement

4.12 - Pt. 3 - Inserting Data Into Tables With Constraints

4.13 - Pt. 4 - INSERTs and Identity Columns: An Overview

4.14 - Pt. 1 - An Introduction to the UPDATE Statement and Modifying Data With Transact SQL

4.15 - Pt. 2 - How Transactions and Locks Affect UPDATE and SELECT Statements

4.16 - Pt. 3 - Writing UPDATE Statements That Reference Multiple Tables (Subqueries)

4.17 - Pt. 4 - Writing UPDATE Statements That Reference Multiple Tables (FROM Clause)

4.18 - Pt. 1 - An Intro to the DELETE Statement

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Videos in this course:(cont.):

Chapter 4: Data Manipulation Language

Viewed?

4.19 - Pt. 2 - How Transactions and Locks Work With the DELETE Statement	<input type="checkbox"/>
4.20 - Pt. 3 - How to Use Subqueries in the DELETE Statement	<input type="checkbox"/>
4.21 - Pt. 4 - How to Use the FROM Clause in the DELETE Statement	<input type="checkbox"/>
4.22 - Pt. 5 - How to Use TRUNCATE TABLE and the Differences Between It and the DELETE Statement	<input type="checkbox"/>
4.23 - Pt. 1 - Using the OUTPUT Clause with the INSERT, UPDATE and DELETE Statements	<input type="checkbox"/>
4.24 - Pt. 2 - Using the INPUT Clause with the OUTPUT Clause	<input type="checkbox"/>
4.25 - Part 1 - An Overview of the Three Types of Aliases You Can Use in a SQL Query	<input type="checkbox"/>
4.26 - Part 2 - Column and Table Aliases	<input type="checkbox"/>
4.27 - Part 3 - Using Aliases for Derived Tables	<input type="checkbox"/>

Chapter 5: Aggregating Data Using DISTINCT, GROUP BY and more

5.1 - When to Use HAVING Instead of WHERE - Aggregates, GROUP BY, and the HAVING Clause	<input type="checkbox"/>
5.2 - A Comparison of DISTINCT and GROUP BY: When to Use Each	<input type="checkbox"/>
5.3 - The Basics of the HAVING Clause	<input type="checkbox"/>

Chapter 6: JOINS and UNIONS - Working with Multiple Tables

6.1 - EXCEPT and INTERSECT - An Introduction to Syntax and Concepts	<input type="checkbox"/>
6.2 - JOINS and UNIONS - How Do I Know When to Use a JOIN or a UNION?	<input type="checkbox"/>
6.3 - UNION Queries - What They Are and How to Use Them (SQL Server 2000)	<input type="checkbox"/>
6.4 - JOINS - An Overview of the Five Types of JOINS (Cross, Outer, and Inner)	<input type="checkbox"/>
6.5 - JOIN Syntaxes - Should You Use ANSI-89 or ANSI-92 Join Syntax?	<input type="checkbox"/>

Chapter 7: Datatypes, Conversion, Variables, Functions and more

7.1 - TOP Operator: What's New and Why Life Is much Easier Today	<input type="checkbox"/>
7.2 - Extended Properties in SQL Server 2000	<input type="checkbox"/>

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Videos in this course:(cont.):

Chapter 7: Datatypes, Conversion, Variables, Functions and more

Viewed?

- 7.3 - Variables - Understanding the Difference Between Using SET and SELECT to Assign Values
- 7.4 - Variables and Scoping - Local Variables and Batch Terminators
- 7.5 - DATETIME and SMALLDATETIME - Working with Dates and Times SQL Server
- 7.6 - What is Context_Info?
- 7.7 - Part 1 - Introduction to Using Control-of-Flow Language in Your SQL
- 7.8 - Part 2 - Using IF Statements to Control Execution in Scripts and Stored Procedures
- 7.9 - Part 3 - GOTO Statements and When and How to Use Them
- 7.10 - Part 4 - Using EXISTS to Control Execution In an IF Statement
- 7.11 - Part 5 - WHILE Loops and Implementing Looping Structure in SQL
- 7.12 - Overview of SET Commands in Transact-SQL - What They Are, Syntax, and How to Use Them
- 7.13 - Scoping of SET Commands - Connections, Stored Procedures, Batches and Functions
- 7.14 - SET Commands for Performance Tuning and Query Execution Statistics
- 7.15 - SET Commands for Working with NULL values
- 7.16 - SET Commands Often Used to Control Dates and Date Formats in Input or Export Data
- 7.17 - Using SET Commands Inside Stored Procedures and When Executing Stored Procedures

Chapter 8: Performance: Index Design, Plan Guides & Execution Plans

- 8.1 - Performance Tuning Query Tips That Everyone Should Know - Using DBCC and SET Commands
- 8.2 - Using the Create Index Wizard in the Enterprise Manager (SQL Server 2000)
- 8.3 - Part 1 - Intro to Query Plans and the Plan Cache
- 8.4 - Part 2 - Adhoc Plans vs. Prepared Plans/ Working in the Plan Cache
- 8.5 - Part 3 - Working with Prepared Plans
- 8.6 - Part 4 - Using Parameterization with the Plan Cache
- 8.7 - Part 5 - Forced Parameterization vs Simple Parameterization
- 8.8 - Part 6 - Working with Plan Guides

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Chapter 9: Subqueries, Nested Queries, and Derived Tables

Viewed?

- 9.1 - Part 1 - Common Table Expressions (CTEs) - What They Are and When to Use Them
- 9.2 - Part 2 - Common Table Expressions (CTEs) - Recursion and Recursive CTEs
- 9.3 - Using the PIVOT Operator - An introduction to PIVOT Tables and Crosstab Queries with PIVOT
- 9.4 - Using the UNPIVOT Operator to Normalize Denormalized Tables and Datasets
- 9.5 - Subqueries, Nested Queries, and Derived Tables - An Introduction to Advanced SQL Constructs
- 9.6 - How to Decide Whether to Write a JOIN or Subquery

Chapter 10: Server-Side Storage: Temp Tables, Table Variables & More

- 10.1 - Choosing Between Cursors, Table Variables and Temp Tables (SQL Server 2000)
- 10.2 - The Differences Between Local Temporary Tables and Global Temp Tables and When to Use Each

Chapter 11: Stored Procedure Programming and Error Handling

- 11.1 - RAISERROR and Substitution Parameters - How to Customize Your Error Messages (SQL Server 2000)
- 11.2 - Stored Procedure Introduction: Using the Create Stored Procedure Wizard
- 11.3 - Pt. 1 - What Output Parameters Are and When to Use Them
- 11.4 - Pt. 2 - Using Output Parameters To Pass Data To the Caller
- 11.5 - Pt. 1 - What Return Values Are and How to Use Them
- 11.6 - Pt. 2 - Using Return Values to Control Program Execution
- 11.7 - Pt. 3 - Best Practices for Using Return Values
- 11.8 - Pt. 1 - Introduction to Stored Procedure Concepts and Common Usage
- 11.9 - Pt. 2 - CREATE PROCEDURE Syntax and Execution
- 11.10 - Pt. 3 - Input Parameters and Variables
- 11.11 - Pt. 4 - OUTPUT Parameters and How to Use Them
- 11.12 - Pt. 5 - RETURN Codes and How to Use Them

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Chapter 12: Views in SQL Server

Viewed?

- 12.1 - Creating and Altering Views in the Enterprise Manager (SQL Server 2000)
- 12.2 - Views: Introduction, When and Where to Use, and Using the Create View Wizard
- 12.3 - Why You Need to Refresh Your Views After Adding Columns to a Table, Part 1

Chapter 13: User-Defined Functions (UDFs) in SQL Server

- 13.1 - Creating Your Own System Functions (SQL Server 2000)
- 13.2 - How to Avoid Using a Temp Table When Constructing Dynamic SQL (Looping) to Build Arrays and Lists
- 13.3 - User-Defined Functions (UDFs) - What They Are and How to Use Them (SQL Server 2000)
- 13.4 - How to Choose Whether to Use a Function, a View or a Stored Procedure
- 13.5 - Pt. 1 - An Overview of the Three Types of User Defined Functions (UDFs)
- 13.6 - Pt. 2 - Working with Scalar-Valued UDFs
- 13.7 - Pt. 3a - A Scalar-Valued UDF for Working with Proper Case and CamelCase
- 13.8 - Pt. 3b - Performance and Our CamelCase Function
- 13.9 - Pt. 4 - Writing Inline UDFs and Multi-Statement UDFs

Chapter 14: Dynamic Data Source Queries

- 14.1 - Creating Linked Servers to Microsoft Access (SQL Server 2000)
- 14.2 - Linked Servers - How to Query Microsoft Excel Named Ranges and Worksheets (SQL Server 2000)

Chapter 15: XML and SQL Server - FOR XML, SQLXML, and MSXML

- 15.1 - XML Schema Collections and Using Typed and Untyped XML Data
- 15.2 - Pt. 1 - Using FOR XML Clauses in SQL Server
- 15.3 - Pt. 2 - Using FOR XML Clauses in SQL Server
- 15.4 - Pt. 1 - Introduction to Using XML with SQL Server

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Viewed?

15.5 - Pt. 2a - Introduction to Using XML with SQL Server

15.6 - Pt. 2b - Introduction to Using XML with SQL Server

15.7 - Pt. 3 - Introduction to Using XML with SQL Server

15.8 - Pt. 4 - Introduction to Using XML with SQL Server

Chapter 16: Design Patterns for Transact-SQL

16.1 - Design Pattern for Finding Duplicate Data - A Simple Way to Spot Non-Unique Rows

16.2 - Design Pattern for Finding Duplicate Data - A Simple Way to Spot Non-Unique Rows

16.3 - Design Pattern for Looping Through Rows and Executing A Stored Procedure

16.4 - Design Patterns and SQL Programming - How You Can Use Patterns to Simplify Your Life

16.5 - Two Ways to Generate Random Numbers and Random Rows From a SQL Server Table

16.6 - Part 1 - Design Pattern for JOINS - A Simple Way to Look at Joining Tables

16.7 - Part 2 - Design Pattern for JOINS - A Simple Way to Look at Joining Tables

16.8 - Pt 1 - How to Delete Duplicate Rows in a SQL Server Table Using the Rank() Function

16.9 - Pt 2 - How to Delete Duplicate Rows in a SQL Server Table Using the Rank() Function

16.10 - Pt 3 - How to Delete Duplicate Rows in a SQL Server Table Using the Rank() Function

Chapter 17: Misc Stuff That Just Doesn't Fit Anywhere Else

17.1 - Pt. 1 - How to Create and Use a Table of Numbers to Find Gaps in Another Table

17.2 - Pt. 2 - How to Work With Arrays and Split() Functions in SQL Server

17.3 - Pt. 3 - A Stored Procedure and Function to Return All Objects in a Given Schema

17.4 - Pt. 4 - A Stored Procedure to Search for a String Value in All Columns in a Database

17.5 - Pt. 1 - How to Decide Between Using a View, Function, or Stored Procedure

17.6 - Pt. 2 - Choosing Between Views, Functions, and Stored Procedures

17.7 - Pt. 1 - An Introduction to Bulk Operations in SQL Server

17.8 - Pt. 2 - An Overview of the Various Scenarios and Tools Available for Bulk Loads

17.9 - Pt. 3 - Finishing Our Overview of Bulk Load Tools and DROPCLEANBUFFERS

