

## **Course 502**

### **Microsoft SQL Server 2005: Server-Side Programming** **(4-5 days)**

#### **Course Description...**

Developers using Transact-SQL and SQL Server 2005 create scalable and robust applications that meet today's data-driven business demands. This course provides hands-on instruction in the creation of procedural code and the writing of advanced queries in T-SQL. Students will receive in-depth coverage of the sophisticated uses of T-SQL, including dynamic execution, triggers, user-defined functions, error handling, and partitioning functions.

#### **Learning Objectives...**

- Programming stored procedures
- Executing procedural code
- Executing user-defined functions
- Understanding input and output parameters
- Understanding when to use cursors
- Implementing dynamic server-side error handling
- Configuring and merging table partitions
- Executing dynamic SQL
- Configuring Before, After, and DDL triggers

#### **Who should attend...**

This course is for anyone who needs to develop in Microsoft SQL Server, as well as anyone who needs to understand the development environment.

#### **Suggested Prerequisites...**

Knowledge equivalent to *Course 501, SQL Server 2005: Writing TSQL Queries.*

**See next page for a detailed course outline...**



## Course Outline...

### Chapter 1: Stored Procedures

- ◆ Input Parameters
- ◆ Output Parameters
- ◆ Variables
- ◆ Table Variables
- ◆ Using Temporary Tables
- ◆ Procedural Coding
- ◆ Cursors

### Chapter 2: Error handling

- ◆ Raiserror
- ◆ Try...Catch
- ◆ Catch Block
- ◆ Transactions

### Chapter 3: Dynamic Execution

- ◆ Exec
- ◆ Building Statements at Runtime
- ◆ Sp\_executesql

### Chapter 4: Triggers

- ◆ AFTER Triggers
- ◆ INSTEAD OF Triggers
- ◆ DML Triggers
- ◆ Triggers vs. Constraints

### Chapter 5: User Defined Functions

- ◆ Scalar Functions
- ◆ Table-Valued Functions

### Chapter 6: Partitioning Tables and Indexes

- ◆ Partition Functions
- ◆ Partitions Schemes
- ◆ Querying Partitions
- ◆ Merging Partitions
- ◆ Partition Metadata

*Please contact your ROI representative to discuss course tailoring!!!*