

518 - Microsoft SQL Server 2005 Structured Query Language Coding (2–days)

Presentation Overview:

This class provides a comprehensive explanation of the concepts of relational databases, and the usage of the Microsoft SQL Server 2005 Structured Query Language as the means by which to process relational data. The lecture begins by defining basic SQL coding, and then progresses to explain fairly advanced Structured Query Language processing statements. Upon completion of the lecture, the students will have a detailed knowledge of the major aspects of relational database systems, and the SQL coding that is used to process a Microsoft SQL Server 2005 system.

Topics Discussed:

Chapter One - Introduction to Relational databases

- Basic relational database concepts
- Tables, rows and columns
- ANSI SQL statements

Chapter Two - Basic SQL Statement coding

- Create Table
- Nulls
- Insert statement coding
- Update statement coding
- Delete statement coding
- Select statement syntax
- Distinct keyword
- Order by processing
- Where clause coding
- Not, And, Or, In, Between keywords
- LIKE keyword and wildcard facilities

Chapter Three - Join Table Processing

- Primary and foreign keys
- Join concepts
- Coding Inner joins
- Coding Outer joins
- Coding self joins
- ANSI Join syntax
- Aliases
- Renaming columns



Chapter Four - Advanced SQL Statement coding

- Aggregate processing
- Subqueries
- GROUP BY processing
- HAVING clause
- UNION
- UNION ALL
- Database concepts
- Advanced subqueries
- Temporary tables
- Creating tables from existing tables

Chapter Five - The coding of functions

- Functions
- String
- Date / Time
- System
- Mathematical

Chapter Six - Additional Coding Facilities

- Constraints
- View Processing
- Subcounts