

20464DC

Developing Microsoft
SQL Server Databases

5 DAYS

This 5-day instructor-led course introduces SQL Server 2014 and describes logical table design, indexing and query plans. It also focusses on the creation of database objects including views, stored procedures, along with parameters, and functions. Other common aspects of procedure coding, such as indexes, concurrency, error handling, and triggers are also covered in this course. Also this course helps you prepare for the Exam 70-464.

Module 1: Introduction to Database Development

Introduction to the SQL Server Platform
SQL Server Database Development Tasks

Module 2: Designing and Implementing Tables

Designing Tables
Data Types
Working with Schemas
Creating and Altering Tables
Partitioning Data
Compressing Data

Module 3: Ensuring Data Integrity through Constraints

Enforcing Data Integrity
Implementing Domain Integrity
Implementing Entity and Referential Integrity

Module 4: Introduction to Indexing

Core Indexing Concepts
Data Types and Indexes
Single Column and Composite Indexes

Module 5: Designing Optimized Index Strategies

Covering Indexes
Managing Indexes
Working with Execution Plans
Using the DTE

Module 6: Columnstore Indexes

Introduction to Columnstore indexes
Creating Columnstore Indexes
Working with Columnstore Indexes

Module 7: Designing and Implementing Views

- Introduction to Views
- Creating and Managing Views
- Performance Considerations for Views

Module 8: Designing and Implementing Stored Procedures

- Introduction to Stored Procedures
- Working With Stored Procedures
- Implementing Parameterized Stored Procedures
- Controlling Execution Context

Module 9: Designing and Implementing User-Defined Function

- Overview of Functions
- Designing and Implementing Scalar Functions
- Designing and Implementing Table-Valued Functions
- Implementation Considerations for Functions
- Alternatives to Functions

Module 10: Responding to Data Manipulation via Triggers

- Designing DML Triggers
- Implementing DML Triggers
- Advanced Trigger Concepts

Module 11: Using In-Memory Tables

- In-Memory Tables
- Native Stored Procedures

Module 12: Implementing Managed Code in SQL Server 2014

- Introduction to SQL CLR Integration
- Importing and Configuring Assemblies
- Implementing SQL CLR Integration

Module 13: Storing and Querying XML Data in SQL Server

- Introduction to XML and XML Schemas
- Storing XML Data and Schemas in SQL Server
- Implementing the XML Data Type
- Using the T-SQL FOR XML Statement
- Getting Started with XQuery

Module 14: Working with SQL Server 2014 Spatial Data

- Introduction to Spatial Data
- Working with SQL Server Spatial Data Types
- Using Spatial Data in Applications