# GogoTraining™
### Leader in IT & Management Training

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# Microsoft SQL Server 2008 – Designing and Maintaining
# Training Course Outline

**Course Description:**

This course is continues to build on concepts from Microsoft SQL Server 2008 – Implementing to deliver a comprehensive Microsoft SQL Server training course.  This Microsoft SQL server class will teach you how to design and optimize the Microsoft SQL Server 2008 database. This Microsoft SQL Server 2008 training course will give you knowledge in how to maintain the SQL Server database for high availability and teach you about address data distribution.  Learn Microsoft SQL Server 2008 successfully with this expert two-part series.

**Course Prerequisites:**

In order to get the most out of this Microsoft training course, we recommend that you complete the *Microsoft SQL Server 2008-Implementing* course and have a minimum of six months database administrator experience.

**Course Objectives:**

As a result of taking this Microsoft online training course, you will be able to:
- Design SQL Server instances
- Create physical databases and object placement
- Design a high availability solution
- Implement a replication strategy for data distribution

**Course Certification:**

*Microsoft SQL Server 2008-Designing and Maintaining* online training course will prepare you for taking the Microsoft's Exam 70-433: TS: Microsoft SQL Server 2008: Database Development.  This course is mapped to Microsoft's official curriculums 6231, 6232, and 2778.  Once you pass your exam you have completed the requirements for the Microsoft Certified Technology Specialist (MCTS): SQL Server 2008, Database Development.

**Course Outline:**

**Module 00: Microsoft SQL Server 2008-Designing and Maintaining - Course Introduction**

**Module 01: Designing a SQL Server Instance and a Database Solution**
- Design for CPU, Memory, and Storage Capacity Requirements
- Design SQL Server Instances
- Design Physical Database and Object Placement

**Module 02: Design Migration**
- Migration

- Consolidation
- Upgrade

### Module 03: Designing a Database Server Security Solution
- Design Instance Authentication
- Design Instance-Level Security Configurations
- Design Database, Schema, and Object Security Parameters
- Lab: Implementing Database Security

### Module 04: Design a Security and Audit Plan
- Design a Security Policy and an Audit Plan
- Design an Encryption Strategy

### Module 05: Designing a Database Solution for High Availability
- Design a Failover Clustering Solution
- Design Database Mirroring
- Lab: Implementing Database Mirroring

### Module 06: Replication
- Design a High-Availability Solution that is Based on Replication
- Design a High Availability Solution that is Based on Log Shipping

### Module 07: Designing a Backup and Recovery Solution
- Design a Backup Strategy
- Design a Recovery Strategy
- Design a Recovery Test Plan
- Lab: Backup and Recover the Database

### Module 08: Designing a Monitoring Strategy
- Design a Monitoring Solution at the Operating System Level
- Design a Monitoring Solution at the Instance Level

### Module 09: Design a Solution to Monitor Performance
- Instance Performance
- Concurrency
- DAC
- Lab: Using Dedicated Administrator Connection (DAC)

### Module 10: Performance Studio
- Design a Tuning Solution using Performance Studio
- Identify Tuning Criteria
- Assign Tuning Solution Goals

### Module 11: Designing a Maintenance Strategy
- Design a Maintenance Strategy for Database Servers
- Design a Solution to Govern Resources

### Module 12: Resource Governor
- Monitor CPU
- Monitor Response Times
- Assign Resource Governor to Users

### Module 13: Designing Policy-Based Management
- Design a Data Compression Strategy
- Design a Management Automation Strategy
- Lab: Defining a Data Compression Strategy

### Module 14: Designing Strategy for Data Distribution
- Administer SQL Server Integration Services (SSIS) Packages
- Design a Strategy to Use Linked Servers
- Design a Replication Strategy for Data Distribution

### Module 15: Data Replication
- Publisher
- Subscriber
- Agent

### Module 16: Microsoft SQL Server 2008-Designing and Maintaining - Course Summary