

## Course Outline

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### 2780 – Maintaining a Microsoft SQL Server 2005 Database



**Duration:** 5 days (30 hours)

#### Learning Objectives:

- Install and configure SQL Server 2005
- Manage database files
- Backup and restore databases
- Manage security
- Monitor SQL Server
- Transfer data into and out of SQL Server
- Automate administrative tasks
- Replicate data between SQL Server instances
- Maintain high availability

#### Target Audience:

This course is intended for IT Professionals who want to become skilled on SQL Server 2005 product features and technologies for maintaining a database

#### Prerequisites:

- Basic knowledge of the Microsoft Windows operating system and its core functionality
- Working knowledge of Transact-SQL
- Working knowledge of relational databases
- Some experience with database design

In addition, it is recommended, but not required, that students have completed:

- Course 2778, Writing Queries Using Microsoft SQL Server Transact-SQL
- Course 2779, Implementing a Microsoft SQL Server Database

#### Topics Covered:

- Installing and Configuring SQL Server 2005
  - Preparing to install SQL Server.
  - Installing SQL Server 2005
  - Managing a SQL Server 2005 Installation.
- Managing Databases and Files
  - Planning databases.
  - Creating databases.
  - Managing databases.
  - Managing a SQL Server 2005 Installation.

- Disaster Recovery
  - Planning a Backup Strategy
  - Backing Up User Databases
  - Restoring User Databases
  - Performing Online Restore Operations
  - Recovering Data from Database Snapshots
  - System Database and Disaster Recovery
- Managing Security
  - Overview of SQL Server Security.
  - Protecting the Server Scope
  - Protecting the Database Scope
  - Managing Keys and Certificates in SQL Server
- Monitoring SQL Server
  - Viewing Current Activity.
  - Using System Monitor.
  - Using SQL Server Profiler.
  - Using DDL Triggers.
  - Using Event Notifications.
- Transferring Data
  - Creating an SSIS Package
  - Deploying an SSIS Package
  - Using SSIS to Extract Data, Perform Lookups, Sort, and split Data
- Automating Administrative Tasks
  - Automating Administrative Tasks in SQL Server 2005.
  - Configuring the SQL Server Agent.
  - Creating Jobs and Operators.
  - Create Alerts.
  - Managing Multiple Servers.
  - Managing SQL Server Agent Security.
- Implementing Replication
  - Creating a Publication
  - Creating a Subscription
- Maintaining High Availability
  - Introduction to High Availability
  - Implementing Server Clustering
  - Implementing Database Mirroring
  - Implementing Log Shipping
  - Implementing Peer-to-Peer Replicator