Course Content

Course Description:

This course provides you with the knowledge and skills to maintain a Microsoft SQL Server 2008 database. The course focuses on teaching individuals how to use SQL Server 2008 product features and tools related to maintaining a database. After completing this course, you will be able to: install and configure SQL Server 2008, manage database files, backup and restore databases, manage security, transfer data into and out of SQL Server, automate administrative tasks, replicate data between SQL Server instances, maintain high availability and monitor SQL Server.

Prerequisites:

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

Topics:

Installing and Configuring SQL Server
- Preparing to Install SQL Server
- Installing SQL Server
- Configuring a SQL Server Installation

Managing Databases and Files
- Planning Databases
- Creating Databases
- Using Policy-Based Management

Disaster Recovery
- Planning a Backup Strategy
- Restoring User Databases
- Performing Online Restore Operations
- Recovering Data from Database Snapshots
- System Databases and Disaster Recovery

Managing Security
- Overview of SQL Server Security
- Protecting the Server Scope
- Protecting the Database Scope
- Auditing Security

Transferring Data
- Overview of Data Transfer
- Introduction to SQL Server Integration Services

- Using the UI and Command-Line Tools to Import and Export Data
- Performance Tuning in SQL Server
- Using the Database Engine Tuning Advisor

Automating Administrative Tasks
- Automating Administrative Tasks in SQL Server
- Using SQL Server Agent
- Creating Maintenance Plans
- Implementing Alerts
- Managing Multiple Servers
- Managing SQL Server Agent Security

Implementing Replication
- Overview of Replication
- Managing Publications and Subscriptions
- Configuring Replication in Some Common Scenarios

Maintaining High Availability
- Introduction to High Availability
- Implementing Log Shipping
- Implementing Database Mirroring
- Implementing Server Clustering
- Using Distributed High Availability Solutions

Monitoring SQL Server

- Viewing Current Activity
- Using SQL Server Profiler
- Monitoring with DDL Triggers
- Using Event Notifications

Troubleshooting and Performance Tuning

- Troubleshooting SQL Server
- Using Resource Governor
- Using Data Collector