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# Computer Visions Course Outline

## Get What You Want

We offer highly customizable group training courses: desktop applications, web development, networking & operating systems, technical certification, professional development & skills, help desk.

## Get It When & Where You Want It

All Computer Visions courses are available for presentation on-site or off-site for your convenience. We can roll out any combination of courses at one or more locations anywhere in the United States, according to your requirements and time table. Just let us know and we'll work with you!

## Corporate Training Solutions

Corporations look to us to train their employees. Why? Because our proven training methods have increased employee proficiency and productivity. We assign one person to each of our corporate clients to ensure quality service, and we also offer extranet Web registration, management, reporting and billing for all clients. Simplicity, quality and outstanding service are our hallmarks.

## Consulting Solutions

Consulting is about trust,

## 2780: Maintaining a Microsoft SQL Server 2005 Database

### Description:

This five-day instructor-led course provides students with the knowledge and skills to maintain a Microsoft SQL Server 2005 database. The course focuses on teaching individuals how to use SQL Server 2005 product features and tools related to maintaining a database.

### Course Outline:

Module 1: Installing and Configuring SQL Server 2005

This module explains how to plan for and install SQL Server 2005, how to manage a SQL Server 2005 installation, and how to use the SQL Server 2005 administrative tools.

#### Lessons

- Preparing to install SQL Server.
- Installing SQL Server.
- Managing a SQL Server 2005 Installation.

Lab 1: Installing SQL Server 2005

- Performing an Installation.
- Managing SQL Server.

After completing this module, students will be able to:

- Prepare to install SQL Server.
- Install SQL Server.
- Manage a SQL Server installation.

Module 2: Managing Databases and Files

This module explains how to manage databases and files.

#### Lessons

service and accountability. Our consulting division is one of the fastest-growing around. Why? Clients trust us to provide excellent service and expertise. Visit our [consulting section](#) for more information.

#### **Classroom and Computer Rentals**

Need space and equipment to conduct specialized presentations or classes? We can help. With our world class classrooms and state of the art projection and presentation equipment, we take care of the details so you can have a successful presentation.

- Planning databases.
- Creating databases.
- Managing databases.

#### Lab 2: Creating and Managing Databases

- Creating a Database.
- Managing Filegroups.
- Viewing Metadata.

After completing this module, students will be able to:

- Plan databases.
- Create databases.
- Manage databases.

#### Module 3: Disaster Recovery

This module explains how to plan and implement a backup and restore strategy.

##### Lessons

- Planning a Backup Strategy.
- Backing Up User Databases.
- Restoring User Databases.
- Recovering Data from Database Snapshots.
- System Database and Disaster Recovery.

#### Lab 4: Implementing a Disaster Recovery Strategy

- Implementing a Backup Strategy.
- Restoring Databases.
- Rebuild The Master Database.

After completing this module, students will be able to:

- Plan a backup strategy.
- Back up user databases.
- Restore user databases.
- Recover data from database snapshots.
- Back up and restore system databases.

## Module 4: Managing Security

This module explains how to manage principals, securables, and permissions, and how to implement cryptography in a SQL Server database.

### Lessons

- Overview of SQL Server Security.
- Securing the Server Scope.
- Securing the Database Scope.
- Managing Keys and Certificates in SQL Server.

### Lab 3: Securing SQL Server

- Creating Logins.
- Creating and Managing Users.
- Using a Certificate to Encrypt Data.

After completing this module, students will be able to:

- Describe the SQL Server security architecture.
- Implement security at the server scope.
- Implement security at the database and schema scopes.
- Use cryptographic functionality in SQL Server.

## Module 5: Monitoring SQL Server

This module explains how to monitor SQL Server performance and activity.

### Lessons

- Viewing Current Activity.
- Using System Monitor.
- Using SQL Server Profiler.
- Using DDL Triggers.
- Using Event Notifications.

### Lab 5: Monitoring SQL Server

- Monitoring SQL Server Performance.

- Tracing SQL Server Activity.
- Implementing DDL Trigger.

After completing this module, students will be able to:

- View current activity in SQL Server.
- Monitor SQL Server performance with System Monitor.
- Monitor SQL Server events with SQL Server Profiler.
- Implement DDL Triggers.
- Implement Event Notifications.

#### Module 6: Transferring Data

This module explains how to transfer and transform data.

##### Lessons

- Overview of Data Transfer.
- Introduction to SQL Server Integration Services.
- Using SQL Server Integration Services.

#### Lab 6: Transferring Data with SQL Server Integration Services (SSIS)

- Create an SSIS Package.
- Deploying an SSIS Package.

After completing this module, students will be able to:

- Describe the tools and technologies for transferring data.
- Describe the main features of SSIS.
- Transfer and transform data with SSIS.

#### Module 7: Automating Administrative Tasks

This module explains how to use the SQL Server Agent to automate administrative tasks.

##### Lessons

- Automating Administrative Tasks in SQL Server 2005.
- Configuring the SQL Server Agent.
- Creating Jobs and Operators.
- Creating Alerts.
- Managing Multiple Servers.

- Managing SQL Server Agent Security.

#### Lab 7: Automating Database Administration

- Configuring the SQL Server Agent.
- Creating Operators and Jobs.
- Creating Alerts.

After completing this module, students will be able to:

- Describe automation options in SQL Server.
- Configure the SQL Server Agent.
- Create jobs and operators.
- Create alerts.
- Manage multiple servers.
- Manage SQL Server Agent security.

#### Module 8: Maintaining High Availability

This module explains how to implement high availability technologies with SQL Server 2005.

##### Lessons

- Introduction to High Availability.
- Implementing Server Clustering.
- Implementing Database Mirroring.
- Implementing Log Shipping.

#### Lab 8: Configuring Database Mirroring

- Setting the Recovery Model.
- Backing Up and Restoring the Database.
- Starting Database Mirroring.
- Performing an Automatic and Manual Failover.

After completing this module, students will be able to:

- Describe high availability options for SQL Server.
- Implement Server Clustering.
- Implement Database Mirroring.
- Implement Log Shipping.

## Module 9: Introduction to Replication

This module explains considerations for implementing replication.

### Lessons

- Overview of Replication.
- Replication Scenarios.

### Lab 9: Implementing Replication

- Creating a Publication.
- Creating a Subscription.

After completing this module, students will be able to:

- Describe replication and its components.
- Describe common replication scenarios.