



Microsoft Certified Technology Specialist: SQL Server 2005 (MCTS) (formerly Microsoft Certified Database Administrator MCDBA)

480 hours

Course Overview/Description

The Microsoft Certified Technology Specialist: Microsoft SQL Server 2005 Online Training Program teaches you thorough knowledge of the product, as well as an understanding of how to use the Transact-SQL language and how to explore the user interface. This program will also prepare you for certification as a technology specialist. This online certification preparation program is offered in partnership with major colleges, universities, and other accredited education providers.

Microsoft Certified Technology Specialists in Microsoft SQL Server 2005 (MCTS: SQL Server 2005) As a Microsoft Certified Technology Specialist, you'll have the knowledge to implement and maintain databases using specific instructions and specifications. You'll be able to install and configure the SQL Server 2005 and transfer data into it and out of it.

This program will prepare you for four Microsoft exams. The training and certification will help you pursue a career as a database administrator, database developer, or business intelligence developer.

Course Objectives

Upon successful completion of this program, you'll be able to:

- Configure Microsoft Windows 2003 Professional on stand-alone computers and on client computers that are part of a workgroup or domain
- Install, configure, manage, and support a network infrastructure that uses Microsoft Windows 2003 server
- Learn network solution technologies including DHCP, IP, OSPF, RIP, and IGMP
- Gain the knowledge and skills needed to design a security framework for small, medium, and enterprise networks by using Microsoft Windows 2003 technologies
- Install, configure, and monitor SQL Server 2005
- Create and manage database files
- Manage security, transactions and locks
- Transfer data into and out of SQL Server and replicate data between instances
- Use XML-related features in Microsoft SQL Server 2005
- Use Service Broker and Notification Services

You'll also be prepared to take these Microsoft exams:

- 70-290: Managing and Maintaining a Microsoft Windows Server 2003 Environment



- 70-291: Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 Network Infrastructure
- 70-270: Installing, Configuring, and Administering Microsoft Windows XP Professional
- 70-431: Microsoft SQL Server 2005 - Implementation and Maintenance

Course Outline

I. Microsoft Windows Server 2003 Environment Management and Maintenance

- A. An Overview of Account and Resource Administration
- B. User and Computer Account Management
- C. Group Management
- D. Resource Access Management
- E. Printer Implementation
- F. Printer Management
- G. Object Access Management
- H. Group Policy Implementation
- I. Group Policy Management
- J. Administrative Templates and Audit Policy Implementation
- K. Server Administration Preparation
- L. Server Performance Monitoring Preparation
- M. Server Performance
- N. Device Driver
- O. Disk Management
- P. Data Storage Management
- Q. Disaster Recovery
- R. Software Maintenance Using the Software Update Service

II. Microsoft Windows Server 2003 Network Services Management

- A. Introducing the TCP/IP Protocol
- B. Assigning IP Addresses in a Multiple Subnet
- C. Configuring a Client IP Address
- D. Configuring a Client for Name Resolution
- E. Isolating Common Connectivity Issues
- F. Using Routing and Remote Access to Configure Routing
- G. Using Dynamic Host configuration Protocol to Allocate IP Addresses
- H. Managing and Monitoring Dynamic Host Configuration Protocol (DHCP)
- I. Name Resolution
- J. Host Name Resolution Using Domain Name System (DNS)
- K. Domain Name System (DNS) Management and Monitoring
- L. NetBIOS Name Resolution Using Windows Internet Name Service (WINS)
- M. Using IPSec and Certificates to Secure Network Traffic
- N. Network Access Configuration
- O. Network Access Management and Monitoring

III. Microsoft Windows XP Professional Administration and Maintenance

- A. Windows XP Installation
- B. Windows XP Installation Automated
- C. Hardware Configuration
- D. Disk Management
- E. File System Configuration and Management
- F. Troubleshooting and Disaster Recovery
- G. Desktop Configuration
- H. TCP/IP Addressing Configuration and Name Resolution
- I. Windows XP Configuration in Microsoft Network
- J. Remote User Management
- K. Mobile Computer Management
- L. System Resource and Performance Monitoring

IV. Microsoft SQL Server 2005 Implementation and Maintenance

- A. Installation and Management
- B. Server Set-up and Database Management
- C. Database Design, Data Types and Data Tables
- D. Understanding and Managing Indexes, Queries, Functions and Clauses
- E. Fundamentals of Queries, Statements, Programming, and Views
- F. Programmable Objects and Data Management
- G. Errors, Transaction Locks, Triggers and XML Data
- H. Working with XML Methods, Indexes, Data, SSIS, and Transferring
- I. Security, Securables, SQL Auditing, Encryption and Decryption, and Common Language Runtime
- J. Working with SQL Server Agent and Distributed Queries, Exploring Replication
- K. Monitoring and Optimization Tools, Database and Query Optimization
- L. Exploring Database Reliability and Availability
- M. Working With and Managing Service Broker, HTTP Endpoints, and Blocks and Deadlocks, Handling SQL Server Errors and Exploring Recovery

Prerequisites/Audience

To enroll in this program, you should have basic knowledge of the Microsoft Windows operating system and its core functionality, working knowledge of Transact-SQL, working knowledge of relational databases, and some experience with database design.

This program is intended for you if you are interested in becoming an MCTS, especially if you want to work as a database administrator, database developer, or business intelligence developer.

PC Requirements/Materials

We highly recommended that you have a high-speed Internet connection (DSL or cable).



You will need to download the following software:

- Adobe Acrobat Reader
- Internet Explorer 6 or higher
- WindowsMedia Player or RealOne Player
- WinZip

Programs are only compatible with Microsoft operating systems and Internet Explorer.

Minimum Hardware Requirements:

- Monitor: 15" Super VGA Monitor (17" is best)
- Processor: Pentium 300, Pentium IV 500, or better
- Network Adapter: 10 base T
- RAM: At least 128MB
- Hard Drive: At least 4 GB
- CD Drive: CD-ROM drive (24x or greater)
- Sound Card: 16 Bit
- Video Adaptor: At least 8MB
- Sound: Headsets (a microphone is optional)
- Screen Resolution: 800 x 600 true color (1024 x 768 is best)
- Operating System: Windows 98 or Windows 2000 Pro or Server, Windows XP and/or Windows Me
- Internet Connection: cable modem or DSL

The materials included with this program are:

- Microsoft approved curriculum textbooks
- Access to an online IT Library

Instructor Bio

Chris Lobban has industry experience with an extensive assortment of hardware and software solutions. Before starting at Academy of Learning, he worked both in a help desk environment and as a quality assurance analyst, where he had to deal with a wide array of different hardware requirements, operating systems, and computer programs every day. This broad experience base, as well as his formal training as a computer networking and technical support specialist from Seneca College, gives him the training and experience needed to provide support to his students. Chris has also certified his experience by earning the CompTIA A+ IT Technician, Network+, Server+, and Security+ credentials, as well as the Microsoft MCSE (Windows Server 2003), MCSA (Windows Server 2003), and MCDST (Windows XP) credential.