



## Microsoft Office Access 2007: Level 1

1 day – Instructor led

Certification: Microsoft Certified Applications Specialist: Microsoft® Office Access 2007

### Course Description

Most organizations maintain and manage large amounts of information. One of the most efficient and powerful ways of managing data is by using relational databases. Information can be stored, linked, and managed using a single relational database application and its associated tools. In this course, you will examine the basic database concepts, and create and modify databases and their various objects using the Microsoft® Office Access™ 2007 relational database application.

**Course Objective:** You will create and modify new databases and their various objects.

**Target Student:** This course is designed for students who wish to learn the basic operations of the Microsoft Access database application to perform their day-to-day responsibilities, and to understand the advantages that using a relational database application can bring to their business processes. The Level 1 course is for the individual whose job responsibilities include designing and creating new databases, tables, and relationships; creating and maintaining records; locating records; and producing reports based on the information in the database. Individuals who want to pursue Microsoft Certified Application Specialist certification in Microsoft Office Access 2007 can also take this course.

**Prerequisites:** Students should be familiar with using personal computers and have used a mouse and keyboard. You should be comfortable in the Windows environment and be able to use Windows to manage information on your computer. Specifically, you should be able to launch and close programs; navigate to information stored on the computer; and manage files and folders. Students should have completed the following courses or possess equivalent knowledge before starting with this course: Windows XP Professional. Microsoft Excel knowledge is helpful.

### Performance-Based Objectives

Upon successful completion of this course, students will be able to:

- Examine the basic database concepts and explore the Microsoft Office Access 2007 environment.
- Design a simple database.
- Build a new database with related tables.
- Manage data in a table.
- Query a database using different methods.
- Design forms.
- Generate reports.



## Course Content

### Lesson 1: Exploring the Microsoft® Office Access™ 2007 Environment

- Topic 1A: Examine Database Concepts
- Topic 1B: Explore the User Interface
- Topic 1C: Use an Existing Access Database
- Topic 1D: Customize the Access Environment
- Topic 1E: Obtain Help

### Lesson 2: Designing a Database

- Topic 2A: Describe the Relational Database Design Process
- Topic 2B: Define Database Purpose
- Topic 2C: Review Existing Data
- Topic 2D: Determine Fields
- Topic 2E: Group Fields into Tables
- Topic 2F: Normalize Data
- Topic 2G: Designate Primary and Foreign Keys
- Topic 2H: Determine Table Relationships

### Lesson 3: Building a Database

- Topic 3A: Create a New Database
- Topic 3B: Create a Table
- Topic 3C: Manage Tables
- Topic 3D: Create a Table Relationship
- Topic 3E: Save a Database as a Previous Version

### Lesson 4: Managing Data in a Table

- Topic 4A: Modify Table Data
- Topic 4B: Sort Records
- Topic 4C: Work with Subdatasheets

### Lesson 5: Querying a Database

- Topic 5A: Filter Records
- Topic 5B: Create a Query
- Topic 5C: Add Criteria to a Query
- Topic 5D: Add a Calculated Field to a Query
- Topic 5E: Perform Calculations on a Record Grouping

### Lesson 6: Designing Forms

- Topic 6A: View Data Using an Access Form
- Topic 6B: Create a Form
- Topic 6C: Modify the Design of a Form

### Lesson 7: Generating Reports

- Topic 7A: View an Access Report
- Topic 7B: Create a Report
- Topic 7C: Add a Custom Calculated Field to a Report
- Topic 7D: Format the Controls in a Report
- Topic 7E: Apply an AutoFormat Style to a Report
- Topic 7F: Prepare a Report for Print



## Microsoft Office Access 2007: Level 2

1 day – Instructor led

Certification: Microsoft Certified Applications Specialist: Microsoft® Office Access 2007

### Course Description

You have the basic skills needed to work with Microsoft® Office Access™ 2007 databases, including creating and working with Access tables, relationships, queries, forms, and reports. But so far, you have been focusing only on essential database user skills. In this course, you will consider how to maintain data consistency, how to customize database components, and how to share Access data with other applications.

**Course Objective:** You will maintain data consistency and integrity; improve queries, forms, and reports; and also integrate Microsoft® Office Access™ 2007 with other applications.

**Target Student:** Microsoft Office Access 2007: Level 2 is designed for students who would like to learn intermediate-level operations of the Microsoft Office Access program. The Level 2 course is for individuals whose job responsibilities include maintaining data integrity; handling complex queries, forms, and reports; and sharing data between Access and other applications. This course is also a prerequisite to taking more advanced courses in Access 2007. Individuals who want to pursue Microsoft Certified Application Specialist certification in Microsoft Office Access 2007 can also take this course.

**Prerequisites:** To ensure the successful completion of Microsoft Office Access 2007: Level 2, the completion of the Microsoft Office Access 2007: Level 1 course, or equivalent knowledge, is recommended.

### Performance-Based Objectives

Upon successful completion of this course, students will be able to:

- Modify the design and field properties of a table to streamline data entry and maintain data integrity.
- Retrieve data from tables using joins.
- Create flexible queries to display specified records, allow for user-determined query criteria, and modify data using queries.
- Enhance the capabilities of a form by grouping form controls and making other aesthetic improvements to make forms work more efficiently and intuitively for the user.
- Customize reports to organize the displayed information and produce specific print layouts.
- Share data across different applications.



## Course Content

### Lesson 1: Controlling Data Entry

- Topic 1A: Restrict Data Entry Using Field Properties
- Topic 1B: Establish a Pattern for Entering Field Values
- Topic 1C: Create a List of Values for a Field

### Lesson 2: Joining Tables

- Topic 2A: Create Query Joins
- Topic 2B: Join Unrelated Tables
- Topic 2C: Relate Data Within a Table

### Lesson 3: Creating Flexible Queries

- Topic 3A: Set Select Query Properties
- Topic 3B: Create Parameter Queries
- Topic 3C: Create Action Queries

### Lesson 4: Improving Forms

- Topic 4A: Design a Form Layout
- Topic 4B: Enhance the Appearance of a Form
- Topic 4C: Restrict Data Entry in Forms
- Topic 4D: Add a Command Button to a Form
- Topic 4E: Create a Subform

### Lesson 5: Customizing Reports

- Topic 5A: Organize Report Information
- Topic 5B: Format the Report
- Topic 5C: Set Report Control Properties
- Topic 5D: Control Report Pagination
- Topic 5E: Summarize Report Information
- Topic 5F: Add a Subreport to an Existing Report
- Topic 5G: Create a Mailing Label Report

### Lesson 6: Sharing Data Across Applications

- Topic 6A: Import Data into Access
- Topic 6B: Export Data
- Topic 6C: Analyze Access Data in Excel
- Topic 6D: Export Data to a Text File
- Topic 6E: Merge Access Data with a Word Document



## Microsoft Office Access 2007: Level 3

1 day – Instructor led

Certification: Microsoft Certified Applications Specialist: Microsoft® Office Access 2007

### Course Description

Your training in and use of Microsoft® Office Access™ 2007 has provided you with a solid foundation in the basic and intermediate skills of working in Microsoft® Office Access™ 2007. You have worked with the various Access objects, such as tables, queries, forms, and reports. In this course, you will extend your knowledge into some of the more specialized and advanced capabilities of Access by structuring existing data, writing advanced queries, working with macros, enhancing forms and reports, and maintaining a database.

**Course Objective:** You will create complex Access databases by structuring existing data, writing advanced queries, working with macros, making effective use of forms and reports, and performing database maintenance.

**Target Student:** This course is for the individual whose job responsibilities include working with related tables; creating advanced queries, forms, and reports; writing macros to automate common tasks; and performing general database maintenance. It is also designed as one in a series of courses for students pursuing the Microsoft® Office Specialist Certification for Microsoft® Office Access™ 2007, and it is a prerequisite to take more advanced courses in Microsoft® Office Access™ 2007.

**Prerequisites:** To ensure your success, knowledge of basic and intermediate features of Access tables, relationships, and queries, forms, and reports is recommended. Access 2007 Level 1 and Level 2 courses or equivalent knowledge are recommended:

### Performance-Based Objectives

Upon successful completion of this course, students will be able to:

- Restructure data into appropriate tables to ensure data dependency and minimize redundancy.
- Write advanced queries to analyze and summarize data.
- Create and revise Microsoft® Office Access™ 2007 macros.
- Display data more effectively in a form.
- Customize reports by using various Microsoft® Office Access™ 2007 features, making them more effective.
- Maintain your database using tools provided by Microsoft® Office Access™ 2007.



## Course Content

### Lesson 1: Structuring Existing Data

- Topic 1A: Analyze Tables
- Topic 1B: Create a Junction Table
- Topic 1C: Improve Table Structure

### Lesson 2: Writing Advanced Queries

- Topic 2A: Create Subqueries
- Topic 2B: Create Unmatched and Duplicate Queries
- Topic 2C: Group and Summarize Records Using Criteria
- Topic 2D: Summarize Data Using a Crosstab Query
- Topic 2E: Create a PivotTable and a PivotChart

### Lesson 3: Simplifying Tasks with Macros

- Topic 3A: Create a Macro
- Topic 3B: Attach a Macro
- Topic 3C: Restrict Records Using a Condition
- Topic 3D: Validate Data Using a Macro
- Topic 3E: Automate Data Entry Using a Macro

### Lesson 4: Making Effective Use of Forms

- Topic 4A: Display a Calendar on a Form
- Topic 4B: Organize Information with Tab Pages
- Topic 4C: Display a Summary of Data in a Form

### Lesson 5: Making Reports More Effective

- Topic 5A: Include a Chart in a Report
- Topic 5B: Print Data in Columns
- Topic 5C: Cancel Printing of a Blank Report
- Topic 5D: Create a Report Snapshot

### Lesson 6: Maintaining an Access Database

- Topic 6A: Link Tables to External Data Sources
- Topic 6B: Manage a Database
- Topic 6C: Determine Object Dependency
- Topic 6D: Document a Database
- Topic 6E: Analyze the Performance of a Database



## Microsoft Office Access 2007: Level 4

1 day – Instructor led

Certification: Microsoft Certified Applications Specialist: Microsoft® Office Access 2007

### Course Description

In previous levels, you were introduced to the various features of Microsoft® Office Access™ 2007 that dealt with local database management. However, effective database management calls for mastering the advanced administrative and collaborative features of Access. In this course, you will exchange data with other applications, automate business processes by using VBA code, and secure and share databases.

**Course Objective:** You will exchange data with other applications, automate business processes by using VBA code, and secure and share databases.

**Target Student:** This course is designed for students who have a thorough understanding of the basic and advanced user features of the Microsoft® Office Access™ 2007 application, and are interested in learning introductory level administrator skill sets. The course is also for the student who may be working in a web-based environment and may need to adapt Access applications to the environment.

**Prerequisites:** To ensure the successful completion of Microsoft® Office Access™ 2007: Level 4, the following courses or equivalent knowledge is recommended: Microsoft® Office Access™ 2007: Level 1 Microsoft® Office Access™ 2007: Level 2 Microsoft® Office Access™ 2007: Level 3

### Performance-Based Objectives

Upon successful completion of this course, students will be able to:

- Share Access data with other applications.
- Use VBA to automate a business process.
- Create and modify a database switchboard, and set the startup options.
- Secure databases.
- Share databases using a SharePoint site.



## Course Content

### **Lesson 1: Integrating Access into Your Business**

- Topic 1A: Import XML Data into an Access Database
- Topic 1B: Export Access Data to XML Format
- Topic 1C: Export Data to the Outlook Address Book
- Topic 1D: Collect Data Through Email Messages

### **Lesson 2: Automating a Business Process with VBA**

- Topic 2A: Create a Standard Module
- Topic 2B: Develop Code
- Topic 2C: Call a Procedure from a Form
- Topic 2D: Run the Procedure

### **Lesson 3: Managing Switchboards**

- Topic 3A: Create a Database Switchboard
- Topic 3B: Modify a Database Switchboard
- Topic 3C: Set the Startup Options

### **Lesson 4: Distributing and Securing Databases**

- Topic 4A: Split a Database
- Topic 4B: Implement Security
- Topic 4C: Set Passwords
- Topic 4D: Convert an Access Database to an ACCDE File
- Topic 4E: Package a Database with a Digital Signature

### **Lesson 5: Sharing Databases Using a SharePoint Site**

- Topic 5A: Export a Table to a SharePoint List
- Topic 5B: Import Data from a SharePoint List
- Topic 5C: Publish a Database to a SharePoint Site
- Topic 5D: Move a Database to a SharePoint Site
- Topic 5E: Work Offline

### **Appendix A: Microsoft Office Specialist Program**



## **Microsoft Office Access 2007: VBA Programming**

1 day – Instructor led

### **Course Description**

This course is designed for experienced Access 2007 users who want to learn ActiveX Data Objects, control structures, and the basics of VBA programming.

### **Course Content**

#### **Lesson 1: Visual Basic Editor**

Topic 1A: Objects  
Topic 1B: Object Browser  
Topic 1C: Collections

#### **Lesson 2: Programming basics**

Topic 2A: Working with data  
Topic 2B: Scope

#### **Lesson 3: Control structures**

Topic 3A: Decision structures  
Topic 3B: Loop structures

#### **Lesson 4: ActiveX Data Objects**

Topic 4A: Getting started with ActiveX Data Objects  
Topic 4B: Working with ActiveX Data Objects

#### **Lesson 5: VBA debugging tools**

Topic 5A: Errors in code  
Topic 5B: Debugging techniques  
Topic 5C: Handling runtime errors

#### **Appendix A: Office integration**

Topic A: Automating Office 2007  
Topic B: Working with Word from Access  
Topic C: Working with Excel from Access