Microsoft® Access 2013

Certification Guide

Courseware 3255 Exam 77-424 ISBN 978-1-55332-399-0

Course Description

This *Microsoft® Access 2013 Certification Guide* teaches students how to design data tables, select appropriate data types and relate tables logically. Students will create and modify database objects including tables, queries, forms, and reports, and will apply intermediate skills to streamline data entry, ensure data integrity, and analyze data.

Students who complete this course will have reviewed all of the exam objectives and be on their way to preparing for Microsoft Office Specialist Access 2013 Exam #77-424. Successful completion of the certification exam provides a competitive advantage by validating the knowledge and skill sets for individuals who may be seeking employment or further job opportunities in their careers.

Course Prerequisites

This course is designed for students who are familiar with personal computers, using a keyboard and using a mouse. The course assumes that students have completed the *Microsoft Windows* course or have equivalent Microsoft Windows knowledge and experience.

- ☐ start and run Windows
- ☐ use the taskbar
- ☐ use the Start button
- ☐ use the Help feature
- ☐ use Minimize, Restore Down/Maximize, or Close
- ☐ use the left and right mouse buttons appropriately
- ☐ understand file management techniques
- ☐ navigate between files, folders, or drives

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About this Courseware
Courseware Description
Course Design
Course Objectives
Conventions and Graphics

Lesson 1: Exploring the Access Environment
Lesson Objectives
An Introduction to Databases
- Databases in Spreadsheets
- Relational Database Management Systems (RDBMS)

What is Access?
- Access Database File

Database Objects
Desktop Databases and Access Web Apps
Components of the Access 2013 User Interface
- The Ribbon
- The Navigation Pane
- Backstage View

Looking at the Screen
- Viewing Screen Tips
- Using the Quick Access Toolbar

Starting Access and Working with Database Files
- Database Wizards
- Templates
- Closing a Database
- Opening an Existing Database

Using the Navigation Pane
- Viewing Objects
- Sorting and Filtering Objects
- Copying Objects
- Renaming Objects
- Deleting Objects
- Setting Navigation Options

Saving and Exporting Databases
- Saving Databases to Different Locations
- Saving a Database as a Template
- Access 2013 and Backward Compatibility
- Exporting Data to Alternate Formats

Setting Access Options
Lesson Summary
Review Questions

Lesson 2: Building Tables
Lesson Objectives
Table Basics
- Planning Tables
- Planning Fields
- Naming Rules and Conventions
- A Model of Table Structure

Data Types
- Field Size Property

Table Views
Creating Tables in Design View
Modifying Tables in Design View
Primary Keys
- Selecting a Primary Key

Creating Tables in Datasheet View
Reusing Design Elements
- Using Quick Start Fields
- Using Application Parts
- Using User Templates

Importing Data
- Importing Tables from Other Databases
- Importing Data from Excel
- Importing Data as a Linked Table

Working in Datasheet View
- Navigating a Datasheet
- Adding, Updating and Deleting Records
- Manipulating a Datasheet
- Printing Datasheet Records

Constraining Input
- Validation Rules
- Input Masks
- Default Values
- Auto-incrementing Fields

Table Relationships
- Relationship Types
- Creating Relationships in a Database
- Creating Lookup Fields

Viewing Related Data
Lesson Summary
Review Questions

Lesson 3: Retrieving the Data You Want
Lesson Objectives
Retrieving Data
Finding Records
- Finding and Replacing Data
- Using Wildcards

Sorting Records
Filtering Records
- Filter by Selection
- Filter by Form

Creating Queries
- Creating a Select Query in Query Design View
- Creating a Select Query with the Query Wizard

Modifying Queries
- Adjusting Fields
- Sorting Query Fields
- Hiding Query Fields

Adding Query Criteria
- Arithmetic Operators
- Comparison Operators
- Concatenation Operators
- Logical Operators
- Special Operators

Working with Joined Tables
Performing Calculations in Queries
- Adding Calculated Fields to a Query
- Formatting Query Fields
- Using the Expression Builder
- Displaying Totals in a Query Result Set Datasheet

Grouping and Summarizing Query Data
Creating Parameter Queries
Using Conditional Logic in a Query
Creating Action Queries
- Creating Update Queries
- Creating Make-Table Queries
- Creating Append Queries
- Creating Delete Queries

Creating Crosstab Queries
Lesson Summary
Review Questions

Lesson 4: Working with Forms
Lesson Objectives
Why Use Forms?
- The Inside Scoop – Controls and Properties
- Designing a Form

Form Types
- Forms with Subforms

Form Views
- Form View
- Layout View
- Design View

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Creating Forms Using Automated Form Tools
- Creating a Detail Form
- Creating a Datasheet Form
- Creating a Split Form
- Creating a Multiple Items Form

Using the Form Wizard
Creating Forms from Scratch
- The Field List Pane
- The Property Sheet
- The Record Source and Control Source Properties

Modifying Forms
- Working with a Form in Layout View
- Working with a Form in Design View

Creating Forms using Application Parts
Deleting Forms
Adding Controls from the Ribbon
- Adding Controls in Layout View
- Adding Controls in Design View
- Aligning and Sizing Controls
- Adding a Subform Control
- Manually Creating and Linking a Subform

Making Forms User-Friendly
- Using Lookup Fields on Forms
- Tab Order
- Validating Data Entry in Forms

Applying Formatting and Design Options
- Working with Headers and Footers
- Working with Fonts, Backgrounds and Images
- Working with Themes
- Formatting Forms for Printing

Navigation Forms
Lesson Summary
Review Questions

Lesson 5: Designing Reports
Lesson Objectives
What is a Report?
- Report Sections
- Designing a Report
- Report Layouts
- Controls and Properties

Report Views
- Report View
- Print Preview
- Layout View
- Design View

Creating Reports
- Using the Report Tool
- Creating a Report Using the Report Wizard
- Creating a Blank Report
- Creating a Report Using Application Parts

Working with Reports
- Working in Layout View
- Working in Design View

Working with Subform/Subreport Controls
Adding Calculations to Reports
Grouping and Sorting Data in Reports
- Adding Grouping Levels with the Shortcut Menu
- Using the Group, Sort and Total Pane

Formatting and Printing Reports
- Previewing and Printing Reports
- Working with Page Size, Orientation and Report Width
- Formatting Reports into Multiple Columns
- Report Headers and Footers
- Adding Images to Reports
- Working with Colors
- Applying a Theme

Printing Reports
- Filtering Printed Output
- Sorting Printed Output
- Print Options

Lesson Summary
Review Questions

Lesson 6: Protecting, Maintaining and Managing Databases
Lesson Objectives
Protecting Database Files
- Open Modes for Databases
- Encrypting and Password-protecting a Database

Maintaining Database Files
- Backing Up a Database
- Recovering Data from a Backup
- Compacting and Repairing

Managing Databases
- Setting Startup Options
- Renaming Database Objects
- Object Dependencies and Deleting Database Objects
- Working with Split Databases
- Merging Databases

Lesson Summary
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Appendices
Appendix A: Courseware Mapping
Appendix B: Glossary of Terms
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