

Microsoft®

# Access 2019

## Certification Guide

Courseware

Exam MO-500

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### Course Description

This *Microsoft® Access 2019 Certification Guide* teaches students how to design, create, and manage databases. Students will design tables, select appropriate data types, and create logical relationships. They will also create and manage queries, forms, and reports, and will use techniques to streamline data entry, maintain 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 Access 365-2019 Exam MO-500. 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.

**Suggested Course Length: 36-60 Hours**

### 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

Courseware Description	Access Table Views	Creating a Select Query in Design View
Course Design	Creating Tables in Datasheet View	Creating a Select Query with the Query Wizard
Course Objectives	Reusing Design Elements	Modifying Queries
Conventions and Graphics	Using Quick Start Fields	Adding and Removing Fields
<b>Lesson 1: Exploring the Access Environment</b>	Using Application Parts	Sorting Query Fields
Lesson Objectives	Importing Data	Hiding Query Fields
An Introduction to Databases	Importing Tables from Other Databases	Formatting Query Fields
Spreadsheet Databases	Importing Data from Excel	Renaming Queries
Relational Database Management Systems (RDBMS)	Appending Records to a Table	Creating Multiple-Table Queries
What is Access?	Importing Data as a Linked Table	Understanding Joins and Relationships
Access Database Files	Working in Datasheet View	Querying Related Tables
Database Objects	Navigating a Datasheet	Creating Joins in a Query
Access Web App Databases and Desktop Databases	Adding, Updating, and Deleting Records	Adding Query Criteria
Components of the Access User Interface	Manipulating a Datasheet	Arithmetic Operators
The Ribbon	Printing Datasheet Records	Comparison Operators
The Navigation Pane	Constraining Input	Concatenation Operators
Backstage View	Validation Rules	Special Operators
Looking at the Screen	Input Masks	Logical Operators
Viewing Screen Tips	Default Values	Performing Calculations in Queries
Using the Quick Access Toolbar	Table Relationships and Keys	Understanding Expressions
Starting Access and Working with Databases	Foreign Keys	Adding Calculated Fields to a Query
Creating New Databases	Relationship Types	Using the Expression Builder
Importing Objects into a Database	Database Schema	Grouping and Summarizing Query Data
Closing Databases	Creating Relationships in a Database	Aggregate Functions
Opening Databases	Creating Lookup Fields	Creating Parameter Queries
Using the Navigation Pane	Working with Related Data	Parameters and Data Types
Viewing Objects	Error/Alert Messages	Adding Parameters
Sorting and Filtering Objects	Messages Encountered in Design View	Using Conditional Logic in a Query
Setting Navigation Options	Messages Encountered during Data Entry	Creating Action Queries
Copying Objects	Messages Pertaining to Related Tables	Creating Update Queries
Renaming Objects	Lesson Summary	Creating Make Table Queries
Deleting Objects	Review Questions	Creating Append Queries
Saving and Exporting Options	<b>Lesson 3: Retrieving the Data You Want</b>	Creating Delete Queries
Saving a Database as a Template	Lesson Objectives	Creating Crosstab Queries
Exporting Data to Alternate Formats	Retrieving Data	Using the Crosstab Query Wizard
Setting Access Options	Finding Records	Lesson Summary
Lesson Summary	Using Wildcards	Review Questions
Review Questions	Finding and Replacing Data	
<b>Lesson 2: Building Tables</b>	Sorting Records	
Lesson Objectives	Filtering Records	
Table Basics	Filter by Selection	
Table Structure	Filter by Form	
Data Types	Understanding Queries	
Primary Keys	Running a Query (Datasheet View)	
Defining Tables in Access		
Modifying Table Fields		
Selecting Fields		
Using the Field Properties Pane		
About Table Properties		

**Lesson 4: Working with Forms**

Lesson Objectives  
 Why Use Forms?  
   Working with Records in a Form  
   The Inside Scoop – Controls and Properties  
 Form Views  
   Form View  
   Layout View  
   Design View  
 Creating Forms Using Automated Form Tools  
 Understanding Forms with Subforms  
 Using the Form Wizard  
 Creating Forms from Scratch  
   The Field List Pane  
   The Property Sheet  
   The Record Source and Control Source Properties  
 Modifying Forms  
   Selecting Controls  
   Removing Controls  
   Resizing Controls  
   Applying Formatting to Controls  
 Working with Layouts  
   Moving Controls  
   Using Table Functions  
 Working with a Form in Design View  
 Positioning Form Controls  
 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  
   Changing the Tab Order  
   Creating Control Tips and Hot Keys  
   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  
   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  
   Deleting Reports  
 Creating Reports from Scratch  
   The Field List Pane  
   The Property Sheet  
   The Record Source and Control Source Properties  
 Working with Reports  
   Selecting Controls  
   Resizing Controls  
   Control Report Positioning  
   Applying Formatting to Report Elements  
   Working in Layout View  
   Working in Design View  
 Adding Controls from the Ribbon  
   Adding Controls from the Ribbon in Layout View  
   Adding Controls from the Ribbon 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 Previewing Reports  
   Previewing Reports  
   Working with Page Size, Orientation and Report Width Margins  
   Formatting Reports into Multiple Columns  
   Report Headers and Footers  
   Adding Images to Reports  
   Working with Colors  
   Applying a Theme

Printing Reports  
   Sorting and Filtering Printed Output  
   Report Output 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  
 Lesson Summary  
 Review Questions  
**Appendices**  
 Appendix A: Courseware Mapping  
 Appendix B: Glossary of Terms  
 Appendix C: Index