

# Microsoft® Office Access® 2016: Part 2

## Course Specifications

**Course Number:** 091046

**Course Length:** 1 day

## Course Description

### Overview:

Your training and experience using Microsoft® Access® 2016 has given you basic database management skills, such as creating tables, designing forms and reports, and building queries. In this course, you will expand your knowledge of relational database design, write advanced queries, structure existing data, validate data entered into a database, and customize reports. Extending your knowledge of Microsoft Access 2016 will result in a robust, functional database for your users.

### Course Objectives:

In this course, you will create and manage an Access 2016 database.

You will:

- Design a relational database.
- Join tables to retrieve data from unrelated tables.
- Validate data entered into a database.
- Use advanced queries to manipulate your data.
- Organize a database for efficiency and performance, and to maintain data integrity.
- Customize reports to organize the displayed information and produce specific print layouts.

### Target Student:

This course is designed for students wishing to gain intermediate-level skills or individuals whose job responsibilities include constructing relational databases, performing database maintenance, or creating advanced queries and reports.

### Prerequisites:

To ensure your success, it is recommended you have completed *Microsoft® Office Access® 2016: Part 1* or possess equivalent knowledge. It is also suggested that you have end-user skills with any current version of Windows, including being able to start programs, switch between programs, locate saved files, close programs,

and use a browser to access websites. You can obtain this level of skills and knowledge by taking either of the following Logical Operations courses, or any similar courses in general Microsoft Windows skills:

- *Using Microsoft® Windows® 10*

or

- *Microsoft® Windows® 10: Transition from Windows® 7*
- *Microsoft® Office Access® 2016: Part 1*

## Course-specific Technical Requirements

### Hardware

For this course, you will need one computer for each student and one for the instructor. Each computer will need the following minimum hardware configurations:

- 1 GHz or faster 32-bit (x86) or 64-bit (x64) processor
- 1 gigabyte (GB) RAM (32-bit) or 2 GB RAM (64-bit)
- 16 GB available hard disk space (32-bit) or 20 GB (64-bit)
- CD-ROM drive (if installing any software from a CD-ROM)
- Keyboard and mouse (or other pointing device)
- 1,024 × 768 resolution monitor recommended
- Network cards and cabling for local network access
- Internet access (contact your local network administrator)
- Printer (optional) or an installed printer driver
- Projection system to display the instructor's computer screen

### Software

- Microsoft® Windows® 10 Professional or Enterprise
- Microsoft® Office Professional 2016

## Course Content

### Lesson 1: Designing a Relational Database

**Topic A:** Relational Database Design

**Topic B:** Create a Table

**Topic C:** Create Table Relationships

### Lesson 2: Joining Tables

**Topic A:** Create Query Joins

**Topic B:** Relate Data Within a Table

**Topic C:** Work with Subdatasheets

### **Lesson 3: Using Data Validation**

**Topic A:** Use Field Validation

**Topic B:** Use Form and Record Validation

### **Lesson 4: Creating Advanced Queries**

**Topic A:** Create Parameter Queries

**Topic B:** Summarize Data

**Topic C:** Create Subqueries

**Topic D:** Create Action Queries

**Topic E:** Create Unmatched and Duplicate Queries

### **Lesson 5: Organizing a Database for Efficiency**

**Topic A:** Data Normalization

**Topic B:** Create a Junction Table

**Topic C:** Improve Table Structure

### **Lesson 6: Using Advanced Reporting Techniques**

**Topic A:** Include Control Formatting in a Report

**Topic B:** Add a Calculated Field to a Report

**Topic C:** Add a Subreport to an Existing Report