Course Content

Course Description:

Your training and experience using Microsoft® Office Access® 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; promote quality input from users; improve database efficiency and promote data integrity; and implement advanced features in tables, queries, forms, and reports. Extending your knowledge of Access will result in a robust, functional database for your users.

This course is the second part of a three-course series that covers the skills needed to perform database design and development in Access 2019.

- ***Microsoft® Office Access® 2019: Part 1***: *Focuses on the design and construction of an Access database* — viewing, navigating, searching, and entering data in a database, as well as basic relational database design and creating simple tables, queries, forms, and reports.
- ***Microsoft® Office Access® 2019: Part 2*** (this course): *Focuses on optimization of an Access database*, including optimizing performance and normalizing data; data validation; usability; and advanced queries, forms, and reports.
- ***Microsoft® Office Access® 2019: Part 3*** : *Focuses on managing the database and supporting complex database designs* , including import and export of data; using action queries to manage data; creating complex forms and reports; macros and Visual Basic for Applications (VBA); and tools and strategies to manage, distribute, and secure a database.

At Course Completion:

In this course, you will optimize an Access 2019 database.

You will:

- Provide input validation features to promote the entry of quality data into a database.
- Organize a database for efficiency and performance, and to maintain data integrity.
- Improve the usability of Access tables.
- Create advanced queries to join and summarize data.
- Use advanced formatting and controls to improve form presentation.
- Use advanced formatting and calculated fields to improve reports.

Target Student:

This course is designed for students wishing to gain intermediate-level skills or individuals whose job responsibilities include constructing relational databases and developing tables, queries, forms, and reports in Microsoft Office Access 2019.

Access 2019 Level 2 for Windows

Course ID #: 7000-059-ZZ-Z

Hours: 7

Prerequisites:

To ensure your success in this course, it is recommended you have completed *Microsoft® Office Access® 2019: 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*
- *Microsoft® Windows® 10: Transition from Windows® 7*

Topics:

Lesson 1: Promoting Quality Data Input

Topic A: Restrict Data Input Through Field Validation

Topic B: Restrict Data Input Through Forms and Record Validation

Lesson 2: Improving Efficiency and Data Integrity

Topic A: Data Normalization

Topic B: Associate Unrelated Tables

Topic C: Enforce Referential Integrity

Lesson 3: Improving Table Usability

Topic A: Create Lookups Within a Table

Topic B: Work with Subdatasheets

Lesson 4: Creating Advanced Queries

Topic A: Create Query Joins

Topic B: Create Subqueries

Topic C: Summarize Data

Lesson 5: Improving Form Presentation

Topic A: Apply Conditional Formatting

Topic B: Create Tab Pages with Subforms and Other Controls

Lesson 6: Creating Advanced Reports

Topic A: Apply Advanced Formatting to a Report

Topic B: Add a Calculated Field to a Report

Topic C: Control Pagination and Print Quality

Topic D: Add a Chart to a Report