

# Access 2007/2010 Level 3

<b>Audience</b>	<p>This course is intended for people who are familiar with any version of Microsoft Access. You should have created a database and created expressions and parameters within queries. You should be able to optimize table indexes and properties to make more efficient queries. Students should take Access Level 2 prior to taking this class.</p> <p>The information in this course is important to developers. It includes advanced query concepts. Queries replace many activities that are programmed in code by other database programs and programming languages. This course also addresses setting up relationships in a database and automating a database through macros.</p>
<b>Description</b>	<p>The course uses a combination of lecture, hands-on practice, and independent exercises to continue to familiarize students with queries and macros important to development in Microsoft Access. The course emphasizes the use of Access through commands, not Wizards.</p> <p>The focus of this course is to learn how to use Access more efficiently and productively through commands and a greater awareness of multiple table database design. It is intended to not only show the student the wide range of problem solving that is available in Access, but to allow them to gain techniques that master database processes.</p> <p>Students define permanent relationships between tables. You build queries based on other queries. You create action queries including update, delete, append, and make tables. Designing and building totals and crosstab queries are also covered. Additionally, students learn how to build simple macros and if time, perform data analysis using both a PivotTable and a PivotChart.</p>
<b>Objectives</b>	<p>Upon successful completion of the class, students should be able to:</p> <ul style="list-style-type: none"><li>■ Create outer join, multiple join, and no join queries</li><li>■ Define permanent relationships between tables</li><li>■ Create totals or group by queries</li><li>■ Create crosstab queries</li><li>■ Create queries based on totals and crosstab queries</li><li>■ Create update, append, delete, and make table queries</li><li>■ Create a simple macro to automate queries and importing/exporting</li><li>■ Create a PivotTable and PivotTable (optional)</li><li>■ Modify a PivotTable and PivotTable (optional)</li></ul>
<b>Length</b>	1 day



**Beyond this Level** When you have successfully completed this class, the next class you should consider is Access Reports and Forms. This course covers editing skills for modifying reports and forms; creating custom reports and forms from scratch; enhancing reports including adding sorting and grouping; adding lines, rectangles check boxes and combo boxes; using various properties to customize both reports and forms. Be sure to leave time for practice before registering for the next level.

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**I. Setting up Relationships**

- A. Creating Multiple Source Queries
- B. What are Relationships?
- C. Expanding/Collapsing Subdatasheets
- D. Enforcing Referential Integrity
- E. Using Cascading Updates and Deletes
- F. Specifying Join Types
- G. Creating Multiple Joins

**II. Totals Queries**

- A. What are Statistical Calculations?
- B. Using Statistical Calculations While Grouping
- C. Excluding Rows Before Grouping
- D. Excluding Results of Grouping
- E. Top Values
- F. Creating Expressions While Grouping
- G. Displaying the Detail Data of a Totals Query
- H. No Join or Cross Product

**III. Crosstab Queries**

- A. What is a Crosstab Query?
- B. Column or Row Heading with Expression
- C. Multiple Row Headings
- D. Adding Row Totals
- E. Excluding Rows Before Crosstabbing

- F. Fixed Column Headings (Optional)
- G. Replacing Nulls with Zeros (Optional)

**IV. Action Queries**

- A. Update Query
- B. Append Query
- C. Make Table Query
- D. Delete Query

**V. Introduction to Macros**

- A. Macro Design
- B. Starting and Saving a Macro
- C. Selecting an Action
- D. Selecting an Action Argument
- E. Running a Macro Manually
- F. Creating a Macro to View/Edit Tables/Queries
- G. Creating a Macro to Transfer Data

**VI. PivotTables/PivotCharts (Optional)**

- A. Creating a PivotTable/PivotChart
- B. Elements of a PivotTable/PivotChart
- C. Modifying a PivotTable/PivotChart
- D. Grouping and Sorting PivotTable Fields
- E. Customizing the Layout