



## Microsoft® Access Level 3 (Advanced)

**Course Length: One Day**

Prerequisites: Intro to PC's or basic computer knowledge, Access Levels 1 and 2.

### **Course Description**

This course teaches advanced techniques such as: querying with SQL; using crosstab, parameter, and action queries; creating and running macros; importing, exporting, and linking database objects; optimizing, replicating, and synchronizing databases; and basic database security.

### **Table of Contents**

#### **Unit 1: Querying with SQL**

Topic A: SQL and Access  
Topic B: Writing SQL statements  
Topic C: Attaching SQL queries to controls

#### **Unit 2: Advanced queries**

Topic A: Creating crosstab queries  
Topic B: Creating parameter queries  
Topic C: Using action queries

#### **Unit 3: Macros**

Topic A: Creating, running, and modifying macros  
Topic B: Attaching macros to the events of database objects

#### **Unit 4: Advanced macros**

Topic A: Creating macros to provide user interaction  
Topic B: Creating macros that require user input  
Topic C: Creating the AutoKeys and AutoExec macros  
Topic D: Creating macros for data transfer

#### **Unit 5: Importing, exporting, and linking objects**

Topic A: Importing objects  
Topic B: Exporting objects  
Topic C: Interacting with the XML documents  
Topic D: Linking Access objects  
Topic E: Working with Windows SharePoint Services

#### **Unit 6: Database management**

Topic A: Optimizing resources  
Topic B: Replicating and synchronizing databases

#### **Unit 7: Security fundamentals**

Topic A: Protecting databases  
Topic B: Encrypting and decrypting databases  
Topic C: User-level security

#### **Appendix A: MOS exam objectives map**

Topic A: Comprehensive exam objectives

### **Course Objectives**

At the end of this course, students will be able to:

- Use SQL statements and examine them in Access, write SQL statements to create queries, and attach an SQL statement to a command button.
- Create crosstab queries to summarize grouped data, create parameter queries to view results based on specified criteria, and create action queries to add, delete, and modify data in tables and to create new tables.
- Create and run macros to automate tasks and attach macros to the events of database objects.
- Create data validation and data-entry macros, create macros that run parameter queries, create the AutoKeys and AutoExec macros, and create macros to import and export database objects.
- Import Access objects into an active database from another Access database and from Excel, export objects from one active database to another Access database, export and import XML documents, link objects from one database to another and update the links, and export and import tables and queries to the Windows SharePoint Services site.
- Work with Database utilities to optimize resources, and replicate and synchronize a database.
- Use a password to secure database files, encrypt and decrypt databases, and set specific permissions for users to secure database objects.