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Course Code: ECDL5v50-07

ECDL 5.0 Module 5
Using Databases (Access 2007)

Overview

In Module 5 the candidate will learn about the main concepts of databases and be able to demonstrate the ability to use a database on a computer. The candidate will be able to create and modify tables, queries, forms and reports, and prepare outputs ready for distribution. The candidate will be able to relate tables and retrieve and manipulate database information using the query and sort tools available in the application.

Target Audience

This publication is intended for people who wish to prepare for Module 5 - Using Databases of ECDL Syllabus 5.0, using Microsoft Access 2007.

Pre-requisites

This publication assumes no prior knowledge of Microsoft Access or a presentation application. However, it would be beneficial to have a general understanding of personal computers and the Windows operating system as the candidate will be required to start applications, work with and copy files, and locate file folders.

Objectives

At the completion of ECDL 5.0 Module 5 Using Databases you should be able to:

- understand how Access is used and how to navigate around it
- design a database with lookup tables
- design a relational database project
- create a database structure using Access 2007
- create a relational database file with multiple tables
- modify the structure of an existing table
- set table relationships and join tables together
- add records to a new table
- use various data validation features in Access to protect data
- work with the records in a database table
- format the data in a table
- sort and filter records in a table
- create simple and effective queries
- perform more advanced queries using a variety of querying techniques
- create queries based on one or more tables
- create meaningful reports from tables
- create and use a variety of forms
- export records to and import records from a wide variety of sources and applications
- find the information you need in Help

Course Duration is 28.3 hrs

** Approximate duration should be used as a guide only. Actual duration will depend upon the skills, knowledge, and aptitude of the participants.*

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Contents

The course focuses on practical work within ECDL 5.0 Module 5 giving learners ample opportunity to use their newly acquired skills through a series of graded exercises.

Access 2007 Orientation
- Understanding Microsoft Access 2007
- Starting Access
- Understanding The Getting Started Screen
- Opening An Existing Database File
- Understanding The Access 2007 Screen
- Working With The Navigation Pane
- Working With A Table
- Working With Other Database Objects
- Closing A Database File
- Exiting From Access 2007

Designing A Lookup Database
- How Access Stores Data
- Access 2007 Data Types
- Scoping Your New Database
- Defining Tables
- Identifying Table Problems
- Refining Table Structures
- Finalising The Design

Relational Database Design
- Designing A Relational Database
- Scoping The System
- Determining The Inputs
- Database Indexing

Creating A Lookup Database
- Creating A New Database File
- Creating The Lookup Table
- Defining The Primary Key
- Saving And Closing A Table
- Creating The Transaction Table
- Understanding Lookup Table Relationships
- Connecting To A Lookup Table
- Viewing Table Relationships

Creating A Relational Database
- Creating A New Database File
- Creating Lookup Tables
- Defining A Primary Key
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- Creating The Expense Type Table
- Creating The Transactions Table
- Creating The Details Table

Modifying Table Structures
- Opening An Existing Table
- Adding Fields To An Existing Table
- Understanding Field Properties
- Changing Field Size
- Changing Number Field Size
- Changing Field Names
- Changing Decimal Places
- Changing Date Formats
- Changing Data Types
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- Understanding Table Relationships
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- Creating A Relationships Report

Adding Records To A Table
- Typing Records In A Table
- Adding Records Using A Form
- Saving A Form Layout For Reuse
- Adding Records Using An Existing Form
- Assignment – Adding Records

Data Validation
- Assigning Default Values
- Validation Rules And Text
- Validating Numbers
- Setting Required Fields
- Working With Validations

Working With Records
- Table Navigation
- Navigating To A Specific Record
- Editing A Record In A Table
- Deleting Record Data
- Undoing A Change
- Deleting A Record
- Deleting Several Records
- Searching In A Table
- Searching In A Field
- Finding And Replacing
- Printing Records From A Table

Formatting Tables
- Changing Column Widths
- Formatting Cells In The Table
- Changing Fonts
- Moving Columns In A Table
- Freezing Columns In A Table
- Hiding Columns In A Table
- Unhiding Columns

Sorting And Filtering
- Simple Sorting
- Sorting On Several Fields
- Sorting Query Results
- Sorting in a Form
- Simple Filtering
- Working With Filters
- Filtering Between Dates
- Filtering Data in a Form

Creating Queries
- Understanding Queries
- Creating A Query Design
- Working With A Query
- Changing A Query Design
- Applying Record Criteria
- Clearing Selection Criteria
- Saving A Query
- Running Queries From The Navigation Pane
- Deleting A Query
- Printing Query Results
- Assignment – Creating Queries

Querying Techniques
- Modifying A Saved Query
- Creating AND Queries
- Creating OR Queries
- Querying Numeric Data
- Querying Dates
- Using A Range Expression
- Querying Opposite Values
- Moving Fields In A Query
- Sorting Query Data
- Removing Fields From A Query
- Querying Using Wildcards
- Examples of Criteria Expressions
- Using Wild Cards in Criteria Expressions
- Problem Characters
- Querying With A Lookup Table

Multi-Table Queries
- Understanding Relational Queries
- Creating A Relational Query Design
- Filtering A Relational Query
- Filtering Related Fields
- Adding More Tables And Fields
- Utilising Hidden Fields
- Unhiding Fields

Creating And Using Reports
- Understanding Reporting In Access
- Creating A Basic Report
- Working With Existing Reports
- Previewing And Printing A Report
- Changing The Report Layout
- Rearrange Controls In A Report
- Working With Report Headers & Footers
- Using The Report Wizard
- Creating A Grouped Report
- Creating A Statistical Report
- Working With Grouped Reports
- Adding The Count Function

Creating And Using Forms
- Understanding Forms
- Creating A Basic Form
- Creating A Split Form
- Binding A Form To A Query
- Using The Form Wizard
- Working With Existing Forms
- Editing Records In A Form
- Deleting Records Through A Form

Working With Form Headers & Footers
Deleting An Unwanted Form
Printing Records From A Form

Importing And Exporting Records

Exporting Records To Microsoft Excel
Exporting Records To A Text File
Exporting Records To XML Format
Importing From Microsoft Excel

Getting Help

Understanding How Help Works
Accessing The Help Window
Browsing For Help
Disconnecting Online Help
Printing A Help Topic

Concluding Remarks