
Access - Introductory / Intermediate

National Competency Standard (BSB07):
BSBITU301A: Create and use databases



Objectives

Upon completion of this course, you will be able to work confidently with an existing Access database, including building custom queries, forms and reports and design and build a simple database consisting of a small number of tables following sound principles of relational design.

Pre-Requisite Skills

Those attending this course should be familiar with personal computers and be competent in the use of the keyboard and mouse.

Duration

Two days.

Course Outcomes

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| <ol style="list-style-type: none">1. Understand fundamental database concepts and determine if Access is an appropriate tool for specific information processing tasks2. Work with Access files3. Create basic tables4. Create basic data entry forms5. Design and use select queries6. Design and build simple reports7. Build macros | <ol style="list-style-type: none">8. Import and export data9. Understand table relationships10. Understand the general principles of normalisation11. Build, link and use lookup tables12. Work with multiple data sources13. Design forms and reports14. Create a navigation form15. Backup and maintain a database |
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Course Content

DAY 1

Course Overview

- Software Versions
- Naming Conventions
- Methodology Used in the Exercises

Database Concepts

- Definitions
 - Database
 - Table
 - Field
 - Record
 - Primary Key
 - Relationship
 - Query
 - Form
 - Report
 - Macro

File Management

- Opening an Existing Database
- Closing a Database
- Creating a New Database
- Saving a Database

Basic Tables

- Table Views
- Data Types
- Primary Keys
- Table and Field Names
- Creating a New Table

Basic Forms

- Creating a New Form
 - Design View
 - Autoforms
 - Wizards
- Form Layouts
 - Columnar Layout
 - Tabular Layout
 - Datasheet Layout

Basic Select Queries

- Select Queries
- Criteria used in Queries
 - Equality
 - Inequality < >
 - Greater than >
 - Less than <
 - Greater than or Equal to > =
 - Less than or Equal to < =
 - Between ... And ...
 - Like
 - Is Null
 - Not

- Using Multiple Criteria
- Parameter Queries

Reports

- Creating Simple Reports
 - Autoreport: Tabular
 - Autoreport: Columnar
 - Report Wizard
 - Label Wizard
 - Chart Wizard

Macros

- The Macro Designer

Importing and Exporting

- Moving objects between Access databases
- Importing data
 - Excel Spreadsheet
 - Text File
- Exporting a table
 - Excel Spreadsheet
 - Text file

Revision

- Review Exercises

DAY 2

Table Relationships

- Relational Database Fundamentals
- Linking Two Tables

Types of Relationship
Referential Integrity

Normalisation

- The Purpose of Normalisation
- Redundancy
- Inconsistent Dependency
- Third Normal Form

Lookup Tables

- Plan the Lookup Tables
- Create the Lookup Table
- Link the Lookup Table to the Data Table
- Set the Lookup Properties in the Data Table

Multiple Data Sources

- Forms and Subforms
- Queries based on multiple tables
- Reports based on multiple tables

Form and Report Design

- Form Sections and Properties
- Report Sections and Properties

Navigation Forms

- Creating Macros which Open the Objects
- Creating a Form to Store Buttons
- Creating Buttons to Launch Macros
- Creating an Autoexec Macro to Start a Navigation Form

Database Maintenance

- Backing up a Database
- Backup Methods
- Backup Frequency
- Other Factors
- Compact and Repair

Revision

- Review Exercises