



MICROSOFT ACCESS INTRODUCTION

Introduction to the Course

A two-day course aimed at delegates who are not familiar with Relational Database or MS Access. The purpose of the course is to allow the delegates to gain an understanding of the Access database environment.

Pre-requisites

Candidates do not need any prior knowledge of Access but have a desire to learn of its potential.

Course Content

Tables

- Data Types
- Properties
- Field Size
- Formats
- Input Masks
- Captions
- Validations
- Primary Keys
- Importing Data
- Exporting Data
- Records Creating/Editing/Deleting
- Finding/Sorting/Copying/Moving
- Hiding/Showing Records
- Fonts and Attributes
- Filtering by Form/By Selection

Queries

- Query Types
- Creating Simple
- Cross Tab/Delete/Update
- Calculate/Building/Sorting
- Criteria/Format/Input Boxes
- Formatting
- Input Boxes
- Join Fields
- Date Queries
- Calculation
- Mathematical Operators
- Queries on Queries

Forms

- Using the Wizard
- Simple Forms
- Single Column
- Tabular
- Datasheet
- Flash
- Main and Sub Forms
- Editing and Redesigning

Reports

- Using the Wizard
- Label Wizard
- Mail Merge from Access
- Grouping/Editing/Printing

Relationships

- Understanding
- Creating
- One to Many
- Many to Many

Macros

- Simple Macros
- Selective Macros
- Printable Macros
- Macros On Forms
- Auto Exec Macros
- Export Macros



MICROSOFT ACCESS INTERMEDIATES

Introduction to the Course

A one-day course aimed at delegates who are familiar with Relational Database and MS Access. The purpose of the course is to allow the delegates to gain a greater understanding of the Access database to enhance the efficiency and power of database applications.

Pre-requisites

Ideally, candidates should have knowledge equal to the Access Introduction course.

Course Content

Design Concepts

- Database design
- Table Relationships
- Restructuring and linking tables
- Primary Keys

Queries

- Joining tables in queries
- Using advanced criteria in queries
- Queries based on queries
- Calculated fields
- Parameter queries
- Crosstab queries
- Update queries
-

Data Entry and Analysis

- Making data entry easier with option buttons, check boxes and list boxes on forms
- Tab order
- Data analysis using calculated fields in forms
- Multi-table forms

Forms/Commands

- Command buttons
- Linking forms
- Switchboard forms
- Control properties

Macros

- Understanding Event Procedures
- Using Macros
- Creating Macros
- Grouping Macros
- Using Conditions in Macros
- Macro actions
- Attaching Macros to Events
- Troubleshooting Macros



MICROSOFT ACCESS ADVANCE

Introduction to the Course

A one-day course which is aimed at delegates who are using Access on a regular basis and who have a specific idea of projects they wish to work with/use as examples for exploring the advanced techniques in Access.

Pre-requisites

Ideally, candidates should have knowledge equal to the Access Intermediate course.

Course Content

Relational Database Design

- Principles and Good Practice
- Creating & Editing a Relational Database
- Types of Relationship
- Referential Integrity

Data Entry Rules

- Validation Rules
- Input Mask
- Lookups

Form Design

- Using Combo Boxes to link to other Tables
- Understanding Combo Box Properties
- Command Buttons
- Pop Up Forms
- Creating Forms with Subforms

Queries/Filtering

- Parameter Queries
- Review of Action Queries
- Crosstab Queries
- Summary Queries
- Query By Form
- Filter by Form
- Join Types
- Functions and Concatenations in Queries
- Handling Dates with Date Functions

Advanced Report Design

- Multiple Table Reports
- Sorting & Grouping Reports
- Calculations in reports

Macros

- What are Macros
- Creating and Editing Macros
- Conditional Macros
- Named Macros
- Utilising Macros with Form Events

Beginning Access Application Design

- Start Up Options
- Hiding the Database Window
- Custom Toolbars
- Customise a Built-in Toolbar
- Attach a Toolbar to a Form or Report

Database Management Tools

- Database Administration
- Documenting the Database Structure
- Backing Up and Restoring a Database
- Compacting and Repairing a Database
- Password Protection & Encryption

Multi-User Database Design

- Splitting the database
- Re-establishing Links
- Record Locking in the File/Server Environment

The Access Security Model

- Creating Groups, Users & Workgroups
- Ownership
- Default Accounts and the Admin User
- User Level Security Wizard
- Setting Permissions and Passwords
- Common Problems and Good Practice



MICROSOFT ACCESS VISUAL BASICS FOR APPLICATIONS

Introduction to the Course

This intensive course is designed to introduce new MS Access programmers to features and facilities of the VBA programming language; to encourage confidence, control and creative use of MS Access by taking a structured look at MS Access VBA; to help developers plan their applications systematically, efficiently and economically; to promote good design and development techniques.

Pre-requisites

A good working knowledge of Windows, the MS Access interface, table creation, basic query and report writing functions, macro development and relational database concepts is desirable.

Course Outline

The VBA Programming Environment

- When to use VBA instead of Macros

Programming in the VBA Language

- Coding in Visual Basic for Applications
- Commenting Code
- Line Continuation Character
- Using Variables and Expressions
- Naming Conventions
- Defining Variables and Assigning Values
- Automatic or Explicit Declarations
- The Variant Data Type; Other Data Types
- Branching and Looping commands
- Indenting Code; Branching
- If...Then; Select Case
- Looping; For....Next
- Do....Loop; For Each.....Next
- Using Arrays and Collections
- Typing in Code
- Optional and Named Arguments
- Passing Arrays as Arguments
- Code Compilation
- Conditional Compilation Directives
- Finding Bugs; Types of Error
- Debugging Code; Stepping Options
- Watch Points and conditional Breakpoints
- AutoData – A Debugging Feature

Error Handling in VBA

- Using VBA to Handle Errors Generally
- Trapping Errors; Writing Useful Error

Handlers

- Other Error Messages; Logging Errors

Manipulating Data; Data Access Objects & SQL

- Data Access Objects; DAO Hierarchy
- Working with Objects and Collections
- Opening Databases Programmatically
- Database and Recordset Objects
- Recordset Objects; Recordset Field Objects
- Dynasets; Snapshots
- Manipulating Data with VBA Methods
- Finding Records in a Recordset
- Editing Data in a Recordset
- Transaction processing Commands
- Using Recordsets to Manipulate Imported Data
- Creating, Using and Deleting Queries from VBA
- Changing Database Definitions through VBA
- Using SQL to Manipulate Databases
- SQL Data Modification Statements
- Methods of Running SQL from VBA Code

Class Modules and Form-Event Procedures

- Creating a Class Module
- Using Class Properties and Methods
- Using Form Events; Form Events and Properties
- Code Behind Forms; Changing Form Properties
- Solutions: Soft Validation
- Creating Validation Event Procedures
- Changing the Message at Run-Time
- Moving to a Specific Form control
- Solutions: Value Derivation
- Creating New Form Instances
- Solutions: Tying Forms/Reports Together
- Using Form Class Modules