

## Microsoft Access - Advanced

### Learning Outcomes

At the completion of this courseware participants will be able to:

- design a relational database project
- create a relational database file with multiple tables
- set table relationships and join tables together
- create queries based on one or more tables
- create and work with aggregation queries
- create and use a series of action queries
- work with a number of macro techniques
- create some simple programming code using VBA

### Course Prerequisites

Access Basic knowledge is an essential prerequisite for this course.

Users should be familiar with using a keyboard and mouse.

### Course Duration:

One day: 9:00am - 4:30pm

### Inclusions:

Each participant will receive a comprehensive course manual and a Certificate of attendance.

### What to Bring:

- Note pad & Pen.
- Examples of work from the office.
- Participants are encouraged to bring along a USB flash drive if they want copies of the work done during class.

### Course Topics:

#### Relational Database Design

- Designing A Relational Database
- Scoping The System
- Determining The Inputs
- Normalising A Database
- First Normal Form (1NF)
- Second Normal Form (2NF)
- Second Normal Form – Case Study
- Third Normal Form (3NF)
- Database Indexing

#### Creating A Relational Database

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

#### Setting Table Relationships

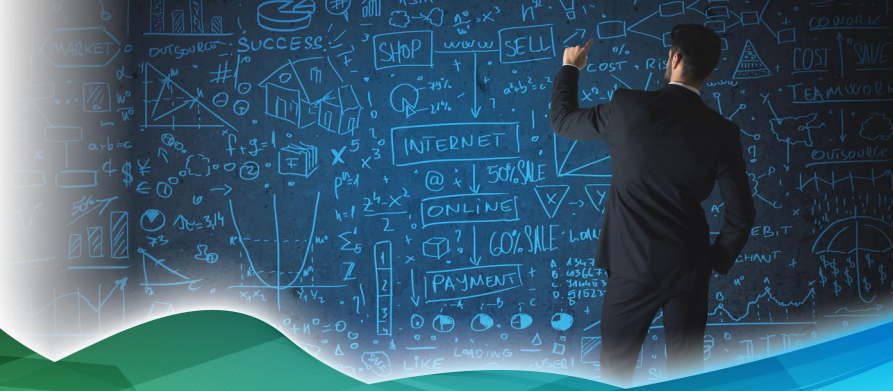
- Understanding Table Relationships
- Understanding Lookup Relationships
- Looking Up The Employees Table
- Looking Up The Expense Types Table
- Viewing Table Relationships
- Understanding Table Joins
- Editing The Employee Table Join
- Editing The Expense Type Table Join
- Creating A New Join
- Creating A Relationship Report

#### 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
- Understanding Query Joins
- Creating An Inner Join
- Creating A Left Outer Join
- Creating A Right Outer Join

#### Aggregation Queries

- Creating An Aggregation Query
- Working With Aggregation Queries
- Multiple Aggregations
- Modifying Aggregation Headings



- Aggregating Calculated Fields
- Applying Criteria To Aggregates
- Understanding Nested Queries
- Creating An Assembly Query
- Creating The Nesting Query

#### Action Queries

- Creating A Make Table Query
- Using A Make Table Query
- Understanding Expressions And Update Queries
- Preparing An Update Query
- Running An Update Query
- Updating Using Expressions
- Running An Expression-Based Update
- Creating A Delete Query
- Running A Delete Query
- Creating An Append Query
- Running An Append Query
- Turning Action Messages Off

#### Macro Techniques

- Creating A Print Macro
- Using Conditions To Enhance A Macro
- Creating A Sequence Of Conditions
- Understanding The Versatility Of MsgBox
- Using The MsgBox Function
- Reconfiguring A Message Box
- Using The InputBox Function

#### An Introduction To VBA

- Understanding VBA
- Coding VBA For An Event
- Running VBA Event Code
- Understanding MsgBox And InputBox
- Modifying An Existing Procedure
- Understanding The Modified Code
- Creating A Standard Module
- Loan Simulator Code
- Understanding The Loan Simulator Code
- Creating A Button For The Simulator
- Attaching The Simulator Code