Microsoft Access 2016 Advanced

Course Code: INF1632

Duration: 1 day

Notes:

- This course syllabus should be used to determine whether the course is appropriate for the students, based on their current skills and technical training needs.
- Course content, prices, and availability are subject to change without notice.
- Terms and Conditions apply

Elements of this syllabus are subject to change.

About this course

The skills and knowledge acquired in Microsoft Access 2016 - Level 3 are sufficient to design and create a multi-table database and automate operations using macros and have a general understanding of the programming environment in Microsoft Access 2016.

At Course Completion

After completing this course, students will be able to:

- design a relational database project
- create a relational database file with multiple tables
- set table relationships and join tables together
- export records to and import records from a wide variety of sources and applications
- create queries based on one or more tables
- create and work with aggregation queries
- create and use a series of action queries
- make your Microsoft Access data and computer more secure
- understand and use a variety of tools that ensure the wellness of your database files
- create some simple programming code using VBA

Prerequisites

Microsoft Access 2016 - Level 3 assumes a significant knowledge of the software, and it would be beneficial to have a general understanding of personal computers and the Windows operating system environment.

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

Importing and Exporting Records
- Exporting Records to Microsoft Excel
- Exporting Records to a Text File
- Importing From Microsoft Excel
- Importing From a Text File
- Linking to an External Source

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

Database Security
- Understanding Database Trust
- Enabling Blocked Content
- Understanding the Trust Centre
- Creating a Trusted Location
- Opening a Database From a Trusted Location
- Encrypting a Database
- Decrypting and Opening a Database
- Removing a Database Password
- Understanding Package and Sign
- Creating a Self Signed Certificate
- Creating a Signed Package
- Extracting and Using a Signed Package

Database Wellness
- Compacting and Repairing a Database
- Understanding Database Splitting
- Using the Database Splitter
- Managing Linked Tables
- Checking Object Dependencies
- Analysing Database Performance
- Documenting a Database

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
- Running the Code
- Understanding the Loan Simulator Code
- Creating a Button for the Simulator
- Attaching the Simulator Code