

Course Content – MS-ACCESS

I) INTRODUCTION TO DATABASE

1. What is MS-Access & its History
2. Introduction to basics of SDLC (Software development life cycle) design.
3. Basic terminology of MS-Access
4. Advantages of MS-Access
5. Database environment
6. Object Model of MS-Access
7. Different versions of MS-Access (2000,2002-2003,2007,2010 & 2013) and what's new in each version of it
8. Different file formats - *.mdb, *.accdb,*.accdt,*.accde, *.be.accdb ...etc., and when to use which format of MS Access.
9. How to Customize MS-Access as per your requirement.

II) Creating your first Database

1. Overview of access database
2. Saving and open database
3. How to take backup of your MS-Access DB
4. How to Improve the performance of MS-Access real quick
5. Navigation pane: Tabs, Tables, Queries, Forms, Reports, Modules & Macros

III) Building smarter tables

1. What are Data Types in MS-Access
2. Data Types: Text, Memo, Number, Date/Time, Currency, AutoNumber, Boolean, OLE Object, Hyperlink, Attachment, Lookup Wizard
3. What is the appropriate data type you need to choose for a column
4. Design the tables with appropriate data type and appropriate keys
5. Types of Views: Design View, Data Sheet View, (old versions: - Pivot Table& Pivot Chart View)

IV) Mastering the datasheet - Sorting, Searching, Filtering and More

1. Datasheet customization
2. Datasheet navigation
3. Advanced editing
4. Printing and datasheet

V) Blocking Bad Data (Data Validation)

1. Data integrity basics
2. Input masks
3. Validation rules
4. Lookups



VI) Linking tables with relationships

1. How to Relate One Table with another Table & its re-usage of existing Tables
2. What is Key in table, Advantages and limitations of Keys
3. What is Primary Key & Foreign Key and its importance
4. Keys Relation with tables
5. Advanced topics related to relationships (One to One, One to Many, Many to Many Relations)
6. Practice Exercise on Building Relationships

VII) Operators

1. Arithmetic Operators
2. Logical Operators
3. Comparative Operators

VIII) Query Building and Expression (Query Syntax)

1. Introduction of SQL Statements (DML, DCL, TCL, DDL)
2. How to Extract data using Queries using SQL
3. How to Insert/Update/Append/Delete data using Queries
4. Extract data from Multiple tables using Queries (Inner Join, Outer Join, Right Join, Union, Union All)
5. Understanding Actionable Queries

IX) Advanced Query Tricks

1. Calculated Fields
2. Math Operations
3. Date/Time Operations
4. String Operations
5. How to work with MS-Access Predefined Functions (Date/Time, Financial, Math, Text, Database, Inspection)
6. Create your own functions using Expression Builders
7. Error Handling Techniques in MS-Access Functions
8. Practice Exercise on Query Building

X) Analyzing Data

1. Few things which you cannot do in Excel Pivot Table but can do in MS-Access

XI) Creating Reports

1. Report basics
2. Printing, previewing, and exporting a report
3. Formatting a report

4. Filtering and sorting a report

XII) Designing Advanced Reports

1. Improving reports and design view
2. The report wizard
3. The label wizard
4. Fine tuning reports with properties
5. Expressions
6. Grouping
7. Creating better layouts

XIII) Creating Forms

1. Overview of Forms
2. Sorting and filtering in a form

XIV) Designing advanced forms

1. Customizing forms in design view (User Define Forms)
2. Taking control of controls
3. Forms and linked tables

XV) Building a Navigation System

1. Mastering the navigation pane
2. Dashboards with MS-Access - Switch Manager
3. Linking to related data

XVI) Automating Tasks with Macros

1. Difference between MS - Access Macros with Excel Macros
2. MS - Access Macros security & settings
3. How to write macros from scratch
4. How to write macros in simple steps
5. Why Access Macros are easier than Excel Macros
6. Assign Macros to Form Controls/Shapes.....
7. Running Macros when specific Event is triggered (Open, Save, Close, Cancel, Stop All, Go To page, Run Macro, Run Saved Import Export, Re-query...)
8. Using VBA/Macros to run a better business

EXCELYTICS

Join Excelytics to Excel in Analytics

XVII) Sharing a database with multiple users

1. How to create Admin permissions
2. User restrictions on Database
3. Customize privileges on your Database
4. Secure your Database with password

XVIII) Importing and exporting data

1. Import data from Excel/SQL Server/Text to MS-Access
2. Export data to Excel/Text from MS-Access

XIX) Connections to other Apps

1. Connecting your MS-Access to Excel/SQL Server
2. Sending Emails from MS-Access.

REAL TIME EXERCISES