

# *Full MIS Course Contents*

## **Excel 2010-13**

### **Scope of Excel 2010 – 2013**

With the help of this programme you would be able to manage data in your respective company. Shortcuts and tips will be able to help you in your day to day routine work.

#### **What will it cover?**

With this Programme you will be able to learn various important aspects of Excel like Conditional Formatting, Validation, Pivot Table, Chart, Advance Filtering, Smart Art, Themes, Formula Auditing, Extraction data from Different Sources, Web Queries, Goal Seek, Solver, Table, Connections, Protection on different level and lots more...

#### **Detailed Contents:**

**Conditional Formatting:** Beyond Simple Conditional Formats

**Data Validation:** Extended Uses of Data Validation • working with Validation Formulae • Lists and Lists That Depend on Other List Selections • Other Methods of Tracking down Invalid Entries

**WHAT IF?** :Using Excel to help you make decisions • Use Goal Seek to find where you need to start to get where you need to go • Use an Excel Data Table to calculate dozens of possible outcomes • Create and manage alternative scenarios • Make more profit or incur less expense by using Excel Solver to identify the best solution

**Sparkline** : In-cell charts – showing 12 times as much information in the same amount of space • Careful with that Axis • The different types of Sparkline: lines, columns and win loss • Sparkline based on a dynamic data range

**Working with External Data:** Getting at your data using the Get External Data tools • Understand relational database • Excel 2013 Data Model create relationships within Excel

**Advanced Uses of Pivot tables** :Use advanced pivot table techniques to do more with your data • Calculated Fields and Calculated items • Using pivot tables as the calculation engine behind management Excel 2010 and 2013 **Slicers and Timelines** - make your pivot tables more interactive • Working with Pivot Charts • Building and interactive dashboard using pivot tables and Slicers

**Power pivot:** The Excel 2010 and 2013 Power Pivot add-in •Power Pivot data tools

**Reporting with Power pivot:** Creating powerful reports with Power Pivot • Hierarchies, Perspectives and Sets •

- Backstage information regarding to files
- Sparkline
- Slicers on filter and on Pivot table
- Timeline
- Power Pivot
- Power View
- DAX
- Flash Fill
- Quick analysis
- Recommended Chart
- Recommended Pivot Table
- Apps of Office

- Power Mapping
- Connection between Tables (Referential Integrity)
- Web Queries
- Conditional formatting using formulas and cell values
- Highlighting duplicates in various ways
- Highlighting top records, bottom records
- Highlight above average, max, min, errors etc.
- Highlight single colour with multiple conditions
- Calculation based conditional formatting
- Restriction using Data Validation
- Different Data Validation in Excel
- Complex calculation based Data Validation
- Using Dynamic list in Data Validation
- Prevent wrong Decisions using Excel Tables
- Introduction to Excel Tables
- Power of Excel Tables
- Time saving features of Excel tables
- Calculation logic of excel tables
- Charts in Excel
- Elements of Charts
- Major charts used in Industry
- The Power of Pivot Tables
- Pivot Table creating methods
- Rearranging a Pivot Table
- Filtering Pivot Table Data
- Performing Custom calculation
- Creating dynamic Dashboards using Slicer
- Consolidating multiple sheets in less than a minute
- Creating multiple sheets in a single click using Pivot
- Data Filtering Techniques
- Introduction to Auto Filter
- Challenges in Auto Filter
- Power of Advance Filter
- Complex calculations based filter
- Filter using Wild Cards
- Analysing data with What-If Analysis
- Introduction to What-If Analysis
- Determine unknown with Goal-Seek
- Analyse Data with Data Table
- Enable Decision making using Solver
- View results with Scenario Manager
- Summarizing Data using Subtotal
- Introduction to Subtotal
- Logic behind subtotal
- Calculations in Subtotal
- Sparkline for Data Trends

- Introduction to Sparkline
- Types of Sparkline in Excel

## Excel Function

### Scope of Function - Formula

This programme is the most important aspect of analytics. Through this you would be able to analyse your data; you would understand how to extract meaningful information from dump data. Formulas make Excel smart. Without them, Excel is just a data keeping tool. But by using formulas, you can crunch data, analyse it and get answers to most complex questions.

#### What will it cover?

- **Lookup** :- (choose, hlookup, indirect, match, transpose, vlookup, lookup, lookup (vector))
- **Logical** :- (and, if, not, or)
- **Date function** :- (date, datedif, datevalue, day, edate, minute, month, days360, eomonth, hour, timevalue, networkdays, now, second, time, today, weekday, workday, year etc..)
- **Database function** :- (Daverage, Dcount, Dcounta, Dmax, Dmin, Dsum)
- **Engineering** :- (Bin2dec, Convert, Dec2bin, Dec2hex, Delta, Hex2dec etc...)
- **Financial function**:- (Db etc.)
- **Information**:- (Cell, Countblank, Info, Isblank, Iserr, Iserror, Iseven, Islogical, Isna, Isnumber, Isodd, Isref, Istext, N, Na etc...)
- **Mathematical**:- (Abs, Combin, Countif, Even, Fact, Gcd, Int, Lcm, Mod, Odd, Pi, Power, Product, Quotient, Rand, Randbetween, Roman, Round, Roundup, Sign, Sum, Sumif, Sumproduct, Rounddown, Sum (Running Total), Sumifs, Countifs,
- **Statistical**:- (Average, Correl, Count, Counta, Large, Max, Min, Mode, Permut, Rank, Small, Frequency, Median, Split Forename And Surname, T Etc...)
- **Text** :- (Char, Clean, Code, Concatenate, Dollar, Exact, Find, Fixed, Left, Len, Value, Lower, Mid, Proper, Replace, Rept, Right, Substitute, Text, Trim, Upper Etc...)
- Offset , Sumifs, Countifs, Workday.Intl, Networkday Intl, Iferror, Etc
- Split & Merging Formula
- Dynamic Formulas
- How to deal with Problem oriented Data

## Excel Macro (VBA) –

### Scope of Excel Macro

VBA language, Excel can do what you tell it. Thus enabling you to program Excel so that you can automate a boring report, format a big and ugly chart, clean-up some messy data. A macro is nothing but a set of instructions you give Excel in the VBA language and help automate common repetitive tasks. Macros are one of Excel's most powerful, yet underutilized feature. Using macros, you can save hours and boost productivity manifold.

#### What will it cover?

- What is Macro?
  - VBA Editor, Project Explorer, Code Pane, and Properties Window
  - The Object Browser
  - Assign Macro
- Recording Macro
  - How to record Macro
  - Shortcut keys
  - Limitations of Recoding
  - How to Optimize Recorded Macro

- Recording Macro R1C1 Style
  - Convert R1C1 Style into general
- What is Variable?
  - Type
  - Scope
  - Assign
  - Value transfer
  - Declaration (Implicit / Explicit)
  - Local, Static, Global
- Object Model
  - Hierarchy
  - Property/Event/Method
- Difference Between Subroutine and Function with example
- Worksheet Concept
  - Different way to refer the Sheet (By Name, By Index)
  - Visibility
  - Renaming
  - Deletion (Single/Multiple)
  - Insertion (Single/Multiple)
  - Referring multiple sheets
  - Copy
  - Moving
- Workbook and Windows Concept
  - Opening
  - Activation
  - State (Minimize/Maximize/Resize)
  - Active window
  - Not Operator
- Refer Cell, Range, Columns, Row
  - Consecutive Range
  - Split range
  - Column Selection (Single/Multiple)
  - Row Selection (Single/Multiple)
  - Difference between Cell and Range
- With Statement
- Current Region and Used Range concept
- Special Cells
  - Comments
  - Formula
  - Visible
  - Constant
  - Last Row
  - Blank
- Filter Data
  - Single Criteria
  - Multiple Criteria
  - AND operator
  - OR Operator
  - Like Operator
  - Top item
  - Bottom item
- IF Statement
  - Simple if
  - If and Else
  - Sorting example
  - MsgBox
  - If else with MsgBox integration
  - Multiple Elseif
  - Nested if
- String and Conversion Functions
  - Concatenation

- Split
- Ucase
- Lcase
- Instr
- Validation
- Len
- Cint
- Val
- Offset Statement
  - Current region
  - Resize Range
  - Set
- While Loop
  - With Conditions
  - Play with variable
  - Inputbox
  - Increment Decrement
  - Is Empty
- For Loop
- Nested For Loop
- For Each loop
- Nested For Each Loop
- Function Procedure
  - Function through looping (for and For each)
  - Inbuilt Function (Multiple Examples)
- Select Case Statement
  - Difference between if and select case
  - Select case with Function Procedure
  - Calling Procedure
- Array
  - Option Base
  - Fixed Size
  - One Dimensional
  - Dynamic array
  - LBound, UBound
  - Redim
- Error Handling Techniques
  - Error Type
  - On Error Resume Next
  - On Error Goto Label
  - On Error Resume Again
  - On Error Goto 0
- Calling Function in a Procedure
  - Through File Handling Example
  - Through Function Procedure
- Userform
  - Label
  - Combobox
  - Listbox
  - OptionButton
  - Checkbox
  - Image
  - Frame
  - ToggleButton
  - Scrollbar
  - SpinBar
  - Property Window
  - How to handle Event (On File opening; Click, DoubleClick; Initialization; Activate; before Entry; before Exit etc.)
  - Validate User input (Multiple Examples)
  - Form as per Application Size (Hiding Excel)

- Disable Application Visibility
- Project Work

## **Access+ SQL (Basic)**

### **Scope of MS Access + SQL (Basic)**

Microsoft Access or Microsoft Office Access is a database system made for individuals and small-to-medium-sized businesses who want to capture, manage, and report data in a professional way. Since Microsoft Access does not require complicated programming, regular people can create powerful data bases in advanced ways with Microsoft Access.

### **What will it cover in MS-Access?**

- Table Creation (Designing View, Wizard, Setting Relationship)
- Query Management (Designing View, Wizard, Sorting, Applying condition, Formulas)
- Form Building : (Designing View & Wizard View)
- Report & Label Creation (Designing View & Wizard View)
- Importing – Exporting
- Query Building [Cross Tab, Unique, Duplicate, Delete, Update, Append and more...]
- Setting up Relationships

### **What will it cover in SQL (Basic) ?**

#### **Introduction to database**

Database terminology

Relational Database

Tables, Rows and Columns

Referential Integrity

#### **DATA QUERY LANGUAGE (BASIC QUERIES)**

##### **SELECT COMMAND**

Viewing Data in a Table

Displaying Unique Values Using the Distinct Clause

Order By

The Where Clause

Using Substitution Variable

Comparison Operator

Like operator

Wildcard Operators

IN operators

Between ...And ...Operator

IS NULL OPERATOR

Logical operator

Expressions in Select Clause

Column Aliases

Expression In where Clause and Order by Clause

##### **SINGLE ROW FUNCTIONS**

Numeric functions

- MOD
- SQRT
- ABS

- Power
- Least
- Greatest
- Round
- Character Functions
  - Conversion
    - Lower
    - Upper
    - Initcap
  - Manipulation
    - Length
    - Concat
    - Substr
    - Instr
    - Lpad
    - Rpad
    - Trim
    - Ltrim
    - Rtrim
    - Replace
    - Reverse
- Date Functions
  - Add\_Months
  - Months\_between
  - Sysdate
  - Next\_day
  - Last\_day
- **GROUP FUNCTIONS (Group functions or Multiple Rows Functions)**
  - Sum
  - Avg
  - Min
  - Max
  - Count

## **Power Point –**

### **Scope of Power Point**

PowerPoint is a complete presentation graphics package. It gives you everything you need to produce a professional-looking presentation. PowerPoint offers word processing, outlining, drawing, graphing, and presentation management tools- all designed to be easy to use

### **What will it cover in Power Point?**

- Creating a Presentation with Microsoft PowerPoint
- Modifying a Presentation
- Inserting Objects into a Presentation
- Finishing a Presentation
- Working with Advanced Tools and Masters

- Enhancing Charts
- Inserting Illustrations, Objects and Media Clips Using Advanced Features

### **Additional features**

- Android Application to learn VBA – Macro through Videos
- We will provide you dummy data for your practise; Assignments through which you can judge to yourself, Interview preparation question, platform where you can discuss you excel related queries/Job openings.
- We will provide you all kind of study material related to this Function and supporting Videos along with the files.
- You will also get video of the class which you attended; you can grab that in you Pan Drive or any storage device. So the content of the class remain with you for life time.
- You can Attend your class by staying anywhere in the world through video conferencing.
- Life time support / Assistance from our side
- We will provide you dummy data for your practise; Assignments through which you can judge to yourself, Interview preparation question, platform where you can discuss you excel related queries/Job openings.
- 100% assistance in job placement.