Base, Advaced Excel & VBA

Base & Advance Excel:

- Advanced formatting techniques

- Conditional formatting

- Cell References (Understanding of Absolute & Relative Cell references)

- Working with multiple worksheets in a workbook

- Data linking between worksheets and workbooks

- Importing and exporting data (text files, other spreadsheets, etc.)

- Retrieve data from a database (intro to MS Query)

- Advanced chart formatting (font formats, text orientation, changing data series order, etc.)

- Using Comments

- Solver

- Scenario Manager

- What if Analysis

- Goal Seek

- Developer Tab

- Techniques to protect the workbook and worksheet

- Advanced filtering techniques

- Using Data Validation tool

- Creating workbooks using templates and creating your own templates

- Auditing worksheets and tracing cell references

- Correcting errors using tracing tools

- Combining worksheets and data from different workbooks

- Using advanced functions

- Financial functions

- Logical functions

- VLOOKUP functions/ HLOOKUP/INDEX/ MATCH

- Aggregate functions

- PivotTables

- Creating and updating

- Manipulating the data layout

- Calculated fields & Items

- PivotCharts

Macros

- Recording macros

- Run macros

- Assigning macros to a button or toolbar

- Edit macros with VBA

Excel VBA

- Day 1

- Exploring the Visual Basic editor in Excel

- VBA Project Explorer and code windows

- Our First Excel VBA Macro

- VBA Project window

- Saving off Macro

- Variables, Arrays, Constant, and Data Types

- Implicit & Explicit Declaration

- Scope & Life time variables

- Static, Local, Module level, Global Variables

- Name Conflicts and shadowing

- Data Types- Variant, Date/Time Values stored in variants, Empty Value, Null value & Others

- VBA Data Types – Numeric & String

- Arrays – Multidimensional & Dynamic

- User defined types, constants, reserved words

- Modules

- Difference b/w subroutines & functions

- Simple subroutine, simple functions

- Public & private functions & subroutines

- Argument Data Types, Optional Aguments, Passing Arguments by value

  Day2

- Programming Basics: Decision and Looping

- Decisions

- Multiple conditional statements

- Select case Statements

- Looping

- For Next loops

- For Each Loop

- Do Until Loops

- While wend loops

- Early exit

Day3

- Strings and Function and Massage Boxes

- Strings Concatenation

- Splitting strings

- Changing the appearance of strings

- Searching strings

- Functions – Len, Abs, Int, Sqr, Asc, Chr

- Conversion Functions- CStr, CInt, CIng, CDbl, Val

- Format functions

- Date & Time Functions

- Now, Date, Time, Date add, Date Diff, DatePart, Date Serial, Date Value, Day, Hour, Month, Second, Minute,

- Year, Weekday

- Send keys Command, Message Boxes

- Operators- Arithmetic + - / \ * ^, Mod Operator

- Comparison operators > < =

- Concatenation Operators

- Logical operators: and, or, Not, Xor

- Other: Is Operator, Like Operator

   Day4

- Debugging

- Types Of Errors: Compile, Runtime, Logical

- Design Time, Runtime, Break Mode, Break Points

- Stop statements

- Run Selected part of code

- Single stepping, Procedure stepping, call stack dialogs

- Debug window

- Events can cause problems when debugging : Mouse down, key down, Got focus/Lost focus

- Using Message Boxes in Debugging, avoiding bugs

- Errors and the Error Function

- Resume Statements

- Implications of Error Trapping, Generating Own errors

- Dialogs

- Viewing Form, Displaying form in code

- Populating form, Default Toolbox Controls

- Label, Text Box, Combo Box, List Box, Check Box, Option Button, Toggle Button, Frame

- Command Button, Tab Strip, Multipage, Scroll Bar, Spin Button, Image, Ref Edit

- Common Dialog Control: Open Dialog, Save As, Color, Font, Pring, Default Dialog

- Command Bars and Buttons

Day5

- The Excel Object Model

- Properties & Methods, Manipulating Properties, Calling Methods

- Communicating with spreadsheet, Hierarchy, Recording Modes

- Application Object – Main Properties, Methods & Collections

- Workbook Object, Windows Objects, Worksheet Object, Range Object

- Driving Microsoft Outlook & other Office Programs

Day6

- Charts and Graphs

- Working with series collection object

- Exporting chart as picture file, Macro recording

Day7

- Pivot Tables

- Creating simple pivot table from the front end of excel

- Creating pivot table using VBA

- Using VBA with pivot tables

- Advance VBA for Pivot Table

Day 8

- VBA in Action

- Converting Labels to Numbers and Numbers to Labels

- Transposing a Range of Cells

- Adding Formula Details into contents

- Calculating a Range

- Reversing a Label

- Evaluating a Cell

- Sorting Worksheets into Alphabetical Order

- Replacing Character in a String

- Timed Event

- Auto – Totaling a Matrix of Numbers

- Absolute and Relative Formulas

- Coloring Alternate Rows and Columns of the Spreadsheet

- Coloring Cells Containing Formulas

- Summing Cells by Reference to a Master Cell

Day 9

- Globally Changing a Range of Values

- Displaying Hidden Sheets without a Password

- Searching Multiple Sheets and Workbooks

- Brighten Up Your Comments

- Importing a CSV File Containing Leading Zeros

- User Forms

Day 10

- Working Data base

- ODBC Links

- Using ADO

Day 11

- Practical Case Studies