



Course Brochure

VBA EXCEL

Overview

• This is a job-oriented course designed keeping in mind the needs and deeds of varying professionals working with the cutting-edge technologies. The basic aim of the course is to automate analysis, reporting and in a nut-shell simplifying the daily-routine through excel-vba that can be understood and applied by any one.

Pre-requisites

• Minimum knowledge in Windows and Ms-office

Applications

• This is widely used in many spheres i.e., with many combinations such as .Net, MS-BI, OBIEE, SAP-BI, Hyperion EssBase, CAD/CAM etc. Manual hours can be minimized in any process with a little effort through VBA automation.

COURSE CONTENTS

Introduction

- ❖ What is VBA?
- ❖ How is it Useful?
- ❖ What is it related to?
- ❖ Other Software with VBA
- ❖ History, Version & Career Growth

Developer Tab

Recording a Macro

- ❖ Recording Options
- ❖ Absolute References
- ❖ Relative References
- ❖ Different workbooks to store macro
- ❖ What is a Personal Macro Workbook?
- ❖ Viewing, Deleting & Working with the Personal Macro Workbook
- ❖ Different ways to run a Macro
- ❖ Changing Options
- ❖ Public & Private Procedures

Visual Basic Editor (VBA IDE)

- ❖ Project Explorer
- ❖ Excel Objects
- ❖ VBA Objects
 - Userforms
 - Modules
 - Class Modules
- ❖ Object Browser
- ❖ Properties Window
- ❖ Code Window
- ❖ Immediate Window
- ❖ Locals Window
- ❖ Watch Window

The VBA Language

- ❖ Data Types
- ❖ Operators
- ❖ Variable Declaration
- ❖ Basic Input & Output Functions

- ❖ The Active Properties
- ❖ Decision Making
 - If, if (single line & multiline), if...else if ladder, selectcase
- ❖ Looping
 - For, While & Do While Until
- ❖ Debugging Techniques
- ❖ Excel Object Model
- ❖ Cells Property

Built-in Functions in VBA

Using Ranges (Programmatically)

- ❖ Activate & Select
- ❖ Working with Font Properties
- ❖ Working with color indexes & customized colors
- ❖ Comments : Add, Change, Delete, Count
- ❖ Ranges with cells
- ❖ Single Parameter Reference
- ❖ Offset Property
- ❖ Next & Previous
- ❖ Ranges on Inactive Worksheets
- ❖ Cut & Paste : to same sheet, other sheet & other workbook
- ❖ Copy & Paste
- ❖ Paste Special (Operation, Transpose, Skip Blanks, Type etc,)
- ❖ Resize
- ❖ Range Property of a Range
- ❖ Merge & Unmerge
- ❖ Union & Intesect
- ❖ Current Region Property
- ❖ End Property
- ❖ **Calling Worksheet Functions**
- ❖ **Using Formula**
- ❖ **Empty Cells**

Special Cells

- ❖ Last Cell,
- ❖ Comments,
- ❖ Blanks

COURSE CONTENTS

- ❖ Conditional Formats
- ❖ Validations
- ❖ Constants (Text values, Numbers, Dates)
- ❖ Visible Cells
- ❖ Rows & Columns Properties

Insert/Delete rows/columns conditionally

Sort (numbers/ numbers stored as text)

AutoFilter

Advanced Filter

Conditional Formatting

Arrays : Single, Multi, Dynamic, Variant

Working with object variables

Working with File System Objects

- ❖ Interacting with Drives
- ❖ Working with Folders & Files
- ❖ Create, Copy & Delete
- ❖ Create & Open text files
- ❖ Write into text files
- ❖ Import data from text files
- ❖ **FileDialog**
- ❖ **FileDialog Filters (Add & Clear)**
- ❖ **FileDialog Selected Items**

Working with UsedRange

Comparing Worksheets

Consolidating Sheets & Workbooks

User-Defined Functions & Procedures

- ❖ Creating UDFs
- ❖ What UDFs Cannot Do
- ❖ Calling Procedures

- ❖ Parentheses and Argument Lists
- ❖ Passing Arrays to UDFs & Procedure

Using Names

- ❖ **Naming Ranges**
- ❖ **Working with Names Collection**
- ❖ **Storing values in Names**
- ❖ **Hiding Names**
- ❖ **Searching for a Name**
- ❖ **Searching for the Name of a Range**
- ❖ **Getting the Range of a Name**

Pagesetup & Print Options

- ❖ **PrintArea, Margins, FitTo, PrintTitles, Preview, Print etc.**

The Application Object

- ❖ DisplayAlerts
- ❖ ScreenUpdating
- ❖ InputBox
- ❖ StatusBar
- ❖ SendKeys
- ❖ OnTime
- ❖ OnKey
- ❖ Linking with Scheduled Tasks

Auto Open Auto Close

Workbooks

- ❖ List of open workbooks
- ❖ Open, Create, Save & Delete Workbooks
- ❖ Overwriting an existing workbook
- ❖ Password & WriteReserve

Worksheets

- ❖ List of sheets in a workbook
- ❖ Add, Delete, Hide & Very Hide
- ❖ Copy & Move
- ❖ Grouping (Array & Across)
- ❖ Protect & Unprotect

COURSE CONTENTS

The Window Object

Pivottable

- ❖ PivotCache
- ❖ PivotFields
- ❖ Pivot From External Data

UserForms

- ❖ Creating Userforms
- ❖ Call Userforms From Procedures
- ❖ Call Procedures From User Forms
- ❖ Label
- ❖ TextBox
- ❖ ListBox
- ❖ ComboBox
- ❖ OptionButton
- ❖ CheckBox
- ❖ Frame
- ❖ ToggleButton
- ❖ Multipage
- ❖ ScrollBar
- ❖ SpinButton
- ❖ RefEdit
- ❖ Calendar

Workbook Events

- ❖ Open, Close, Save etc

Worksheet Events

- ❖ Selection_change, Change, Before_Double_Click etc

Class Modules (Application Events)

Automation through other applications

- ❖ Late Binding
- ❖ Early Binding
- ❖ Creating a **WORD DOCUMENT**, writing & Saving
- ❖ Creating a **PRESENTATION**, sending a graph from Excel & Saving
- ❖ A Function to send mails through **OUTLOOK**

Working with Windows API

An Overview of ODBC Connections & MS-Query

An Overview of ADO

- ❖ The Connections Object
- ❖ The Recordset Object
- ❖ Select, Insert, Update, Delete From :

Access & Sql Server