Overview Comparison of **Excel with Macros and VBA** Training Content

Accelerate your Excel skills by learning advanced Excel techniques, including creation of Macros and associated VBA* code, by taking the following workshops:

- o   Excel with Macros and VBA – **Level 1 – Data Input & Navigation**
- o   Excel with Macros and VBA – **Level 2 – Data Analysis**
- o   Excel with Macros and VBA – **Level 3 – Formulas & Functions**

This "Macros and VBA" training is designed to equip Typical Excel Users with the skills needed to take greater control of their Excel projects.
The primary learning paradigm is based on a "Worksheet/Macro Recorder" Centric approach, rather than a "VBA Code/Programming" approach. This results in a set of Excel and VBA skills that equips users with Macro Recording Best Practices to generate, and as needed, modify VBA Code for automation of repetitive Excel projects.

Workshop	Use/Learn "Worksheet Centric" Features	"Macro Recorder/VBA Code" Features
1. Data Input	Use worksheet features to enhance data input, including: - AutoFill and Data Validation with dynamic reference to valid values. - Create an Input Form using everyday worksheet formatting features combined with data validation and worksheet buttons. - Create a Database Update Application that uses an input form with worksheet buttons used to execute created macros.	- Use the Visual Basic Editor to examine and modify VBA code that's generated by Excel's Macro Recorder. - Identify and fix "breakable code" and make it "unbreakable". - Use Absolute and Relative Referencing to generate macros. - Enable user control of macro processing through creation of Worksheet Buttons and Message Boxes. - Protect worksheet, workbook and VBA code.
2. Data Analysis	Use Excel's Analytical Tools to: - Automate Data Consolidations, - Automate Data Filter* and Output Filter Status, - Automate Data Sort and Data Subtotaling options, - Automate PivotTable* Analysis and the Creation of Charts. * Use a Dynamic Range to automatically recognize new records.	- Transform code generated for the processing of a single object (like a file) into code that handles multiple objects, by using VBA Processing Loops and Parameter-Driven coding methods. - Correctly manage File Paths generated by the Macro Recorder. - Use VBA's Input Box messaging to accept user input directives. - Use "Error Trapping" for user-friendly run-time error handling.
3. Formulas Functions	Use Cell Referencing methods to create "Unbreakable" Formulas. Use key worksheet functions from Financial, Date/Time, Math / Statistical, Lookup/Reference, Database, Text, Logical and Information categories. Learn to create/use Boolean Data for worksheet processing.	Understand the key differences between Macro (Sub) Procedures and User Defined (Function) Procedures. Create User Defined Functions (**UDF**s) to enable custom complex worksheet calculations to be easily inserted into worksheets.
Over All 3 Workshops	While the ultimate purpose of these workshops is to develop skills that enable the Automation of Excel processing (through Macros, UDFs and associated VBA code), this is achieved through use of Excel's worksheet features, described above. Thus, Macro/UDF/VBA technology is learned, within the context of using Excel features which users easily relate to.	Use Excel's Macro Recorder in ways that generates effective code. Develop a level of confidence that enables Excel users to examine and modify VBA code, through use of Excel's Visual Basic Editor. After developing a fundamental VBA code and VB Editor skill set, move on to development of UDFs by creating code "from scratch".