

# Software Solutions

## Microsoft Excel Level Six

### Macros & VBA Programming



The aim of this course is to extend the Excel users knowledge of macros introduced in Level Three. Users are introduced to direct programming skills in Visual Basic for Applications. This course will provide the Excel user with the VBA skills necessary to automate tasks including importing and exporting data, creating and modifying charts, reporting and manipulating spreadsheet data, and creating interactive user forms. Participants must be completely conversant with the material covered in the Excel Level One, Level Two and Level Three Courses.

#### COURSE CONTENT

##### MACROS

<input type="checkbox"/> DEVELOPER TAB & MACRO SECURITY	<input type="checkbox"/> RECORDING MACROS
<input type="checkbox"/> RECORDING MACROS	<input type="checkbox"/> RUNNING A MACRO
<input type="checkbox"/> MACRO OPTIONS: SHORTCUT KEY ASSIGNMENT	<input type="checkbox"/> VIEW THE MACRO CODE
<input type="checkbox"/> THE VISUAL BASIC EDITOR (VBE)	<input type="checkbox"/> PROJECT EXPLORER & PROPERTIES
<input type="checkbox"/> ALTERING AND RUNNING CODE	<input type="checkbox"/> WORKING WITH UNDERSCORE
<input type="checkbox"/> WORKING WITH TOOLBARS	<input type="checkbox"/> MODULES MANAGEMENT

##### MACRO Project

<input type="checkbox"/> IMPORTING A FILE	<input type="checkbox"/> STEP INTO CODE
<input type="checkbox"/> VARIABLES, AUTO LIST MEMBERS, AUTO QUICK INFO	<input type="checkbox"/> DECLARING VARIABLES AND THEIR DATA TYPES
<input type="checkbox"/> REFERRING TO THE ACTIVE SHEET	<input type="checkbox"/> FILL MISSING LABELS
<input type="checkbox"/> ADDING DATES	<input type="checkbox"/> VARIABLES AND INPUT BOXES
<input type="checkbox"/> APPENDING TO DATABASE	<input type="checkbox"/> RELATIVE REFERENCES & PROCEDURES LIST
<input type="checkbox"/> DELETE WORKSHEET & TURN OFF ALERTS	<input type="checkbox"/> ASSEMBLING MACROS TOGETHER

##### MODULES, VARIABLES and DATA TYPES

<input type="checkbox"/> DECLARING VARIABLE DATA TYPES	<input type="checkbox"/> VARIABLES WITH INPUT BOXES
<input type="checkbox"/> VARIABLES WITH MESSAGE BOXES	<input type="checkbox"/> APPLICATION INPUTBOX STATEMENT
<input type="checkbox"/> DO LOOP STATEMENT	<input type="checkbox"/> IF STATEMENTS
<input type="checkbox"/> FOR NEXT STATEMENT	<input type="checkbox"/> EXIT SUB
<input type="checkbox"/> REFERRING TO CELLS, RANGES, ROWS AND COLUMNS	<input type="checkbox"/> CELL REFERENCE, ACTIVE CELL VALUE & COUNT

##### WORKBOOK and SHEET OBJECTS

<input type="checkbox"/> ACTIVE WORKBOOK AND ACTIVESHEET	<input type="checkbox"/> WITH AND END WITH (WEND) STATEMENTS
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##### FOR EACH MEMBER In a COLLECTION

<input type="checkbox"/> FOR EACH ... NEXT IN A RANGE	<input type="checkbox"/> FOR EACH ... NEXT IN A WORKBOOK
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##### SELECT CASE STATEMENTS and NAMED RANGES

<input type="checkbox"/> CREATING, EDIT, DELETE A NAMED RANGE	<input type="checkbox"/> REFERRING TO AND SELECTING A NAMED RANGE
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##### CONSTANTS and DATA SCOPE and SURVIVAL

<input type="checkbox"/> SCOPE OF A VARIABLE	<input type="checkbox"/> SURVIVAL OF A VARIABLE
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##### USER DEFINED FUNCTIONS and STRING FUNCTIONS

<input type="checkbox"/> FUNCTION: CHR() AND CHARACTER SET (0 - 127)	<input type="checkbox"/> CHARACTER SET (128 - 255)
<input type="checkbox"/> FUNCTION: INSTR()	<input type="checkbox"/> FUNCTION: LCASE ()
<input type="checkbox"/> FUNCTION: LEFT()	<input type="checkbox"/> FUNCTION: LEN()
<input type="checkbox"/> FUNCTION: MID()	<input type="checkbox"/> FUNCTION: RIGHT()
<input type="checkbox"/> FUNCTION: STRCONV()	<input type="checkbox"/> FUNCTION: UCASE ()

##### WORKING with CHARTS

<input type="checkbox"/> REFERRING TO AN EMBEDDED CHART	<input type="checkbox"/> REFERRING TO A CHART SHEET
<input type="checkbox"/> CREATE AND MODIFY A CHART WITH CODE	<input type="checkbox"/> USER DEFINES CHART DATA SOURCE

##### WORKING with EVENT PROCEDURES

<input type="checkbox"/> WORKBOOK EVENTS	<input type="checkbox"/> WORKSHEET EVENTS
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##### DEBUGGING CODE

<input type="checkbox"/> COMPILE VBAPROJECT AND DEBUG TOOLBAR	<input type="checkbox"/> RUN, STEP INTO AND BREAKPOINTS
<input type="checkbox"/> THE IMMEDIATE AND LOCALS WINDOWS	<input type="checkbox"/> DEBUG PRINT STATEMENTS

##### ERROR HANDLING

<input type="checkbox"/> TRAPPING ERRORS AND ERROR HANDLER	<input type="checkbox"/> HOW TO ENTER ERROR HANDLING CODE
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##### PROTECTION

<input type="checkbox"/> PROTECTING AND UNPROTECTING A WORKSHEET	<input type="checkbox"/> PROTECTING AND UNPROTECTING PROJECT CODE
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##### USER FORMS

<input type="checkbox"/> CREATING A USER FORM	<input type="checkbox"/> WORK WITH CONTROLS IN THE TOOLBOX
<input type="checkbox"/> TAB ORDER	<input type="checkbox"/> COMMANDS BUTTONS
<input type="checkbox"/> CONTROL PROPERTIES	<input type="checkbox"/> CONTROL CODE

##### EXCEL KEYBOARD SHORTCUTS