

1	Welcome to the course		
	Course Structure & Content		
	Important Compatibility & Setup Information		
	Course Resources: Download Course Project Files		
	Course Expectations		
2	Your First Macro		
	Overview: Macros & Visual Basic Editor (VBE)		
	Steps to Your First Macro Recording		
	Visual Basic Editor: What You Need to Know		
	Project: Dynamic Selection (Go to Special) - Perfect for Flexible Macros		
	Project: Copy (Consolidate) Data - Absolute versus Relative Macro Recording		
	7 Ways to Run Macros / VBA code (incl. creative & modern buttons)		
	OFFICE 365 Update: Change from Comments to Notes		
	Activity: Record a Macro that Deletes all Comments		
	What's the Difference Between Macros and VBA?		
	Quiz: Test Your Knowledge on Macros		
3	The Object Model		
	Overview: VBA Object Model (What you need to become an expert in VBA)		
	VBA's Code Reference Object Library		
	VB Color Guidelines & Keyboard Shortcuts		
	Excel VBA Object Model		
	Object Properties		
	Object Methods		
	How to Find the Object, Property & Method		
	Test Your Knowledge about the Object Model		
	Conclusion: Key Takeaways & Message from Me		
4	Referencing Ranges, Worksheets & Workbooks		
	Overview: Referencing Ranges, Worksheets & Workbooks		
	Referring to Ranges & Writing to Cells in VBA		
	Most Useful Range Properties & Methods		
	4 Methods to Find the Last Row of your Range		
	Copying & resizing a variably sized range		
	Properly Referencing Worksheets		
	Properly Referencing Workbooks		
	Activity: Save a Hardcoded copy of Workbook		
	Project: Save Hard-coded Copy & Macro-free version of Workbook		
	Conclusion: Key Takeaways for Referencing Ranges		
5	Working with Variables		
	Overview: Role of Assignment & Variables		
	Data Types for Better Performance		
	Declaring Variables, Arrays & Constants (Role of Option Explicit)		
	Using Object Variables (Set statement)		
	Scoping Variables		
	Activity: Revisit Hard-coded Workbook Project & Use Variable Assignment		
	Test Your Knowledge on Variables and data types		
	Key Takeaways for Working with Variables		
6	Looping through Collections & Making Decisions		
	Overview: Why Collections are a VBA Essential		
	With & End With for Easier Code Writing		
	For Each to Loop Through Collections (sheets, ranges etc.) in one go		
	IF Then (Else, ElseIF) for Conditional Outcomes		
	Select Case as Alternative for Many IF Statements		
	Goto Statement to Change Program Flow		
	Activity: Get the Number of Formulas on the worksheet		
	Project: Get the Number of Formulas on the Worksheet		
	Bonus: Unhide All Sheets in One Go		
	Key Takeaways for Collections & Decision Making in VBA		
7	Useful Built-in Functions		

	Completed	Your Notes
	Overview: VBA versus Worksheet Functions	
	Most Useful VBA Functions	
	Message Box (also with Yes, No buttons)	
	Input Box (VBA InputBox Function)	
	Input Box that can Select Ranges (Excel InputBox Method)	
	Activity: Show Top 3 Values in a Message Box Based on Range Selected	
	Project: Show Top 3 Values in a Message box based on Range Selected	
	Key Takeaways Built-in Functions	
8	Debugging, Error Handling & Procedure Scope	
	Overview: Debugging, Handling Errors & Procedure Scope	
	Debugging Options: Watch, Locals, Immediate Windows & More	
	Error Handling: Different Methods	
	Faster Code by Suppressing Pop-ups & Flickering Screen	
	Procedure Scope & Running one Sub from Another	
	Passing Arguments to Sub Procedures (By Ref, By Val)	
	Activity: Get the Total Number of Formulas (or Comments) Used in a Workbook	
	Project: Get the Total Number of Formulas (or Comments) Used in a Workbook	
	Key Takeaways Debugging, Error Handling & Course Map Status	
9	Main Project #1: Create a Tool to Automate Table of Contents	
	Project overview: Table of Contents (TOC) with one click	
	TOC Project: The Basics	
	TOC Project: Adding Hyperlinks	
	TOC Project: Testing the VBA Code	
	TOC Project: Adding Error Handling & More Checks	
	TOC Project: Adding to Personal Macro Workbook (Make it Available to all Files)	
	First Milestone Completed!	
10	Looping in VBA (controlling the flow of code)	
	Section Overview: Looping in VBA	
	For Next Counter Loops (Simple Example)	
	For Next Nested Loop (Loop through Text & Cells)	
	For Next Reverse Loop (Delete Filtered/Hidden Rows)	
	Do Until & Do While Loop	
	Practical Example of Do Loop (with Inputbox)	
	Find Method for Quicker Lookup Results	
	Find Method with Do Loop - Multiple Matches	
	Add a Timer to Test & Speech to Inform	
	Activity: Document all Comments in Workbook in a Sheet	
	Project: Document all Comments in Workbook in a Sheet	
	Useful VBA Statements & Key takeaways for Looping in VBA	
11	Working with Arrays	
	Overview: Working with Arrays in VBA	
	One Dimensional Arrays (and transferring back to sheet)	
	Dynamic Arrays (size adjusts depending on a condition)	
	Preserving Dynamic Arrays (adding more elements to the existing array)	
	Two Dimensional Arrays	
	Variant Arrays: Quick Method to Write to Cells	
	Activity: Create a New Worksheet per Company with Specific Information	
	Project: Create a New Worksheet per Company with Specific Information	
	Key Takeaways Arrays	
12	Working with Files, Folders & Text Files	
	Overview: Working with Folders & Files	
	DIR Function: Check if Files or Folders Exist	
	GetOpenFileName Method: User Selects a File	
	FileDialog Property: Loop Inside a Folder	
	Create CSV File from Data in Excel	
	Printing & Writing to Text Files for More Control	
	Activity: Export Data to Text file (fix Delimiter to Semicolon)	
	Project: Export Data to Text file (fix Delimiter to Semicolon)	
	Key Takeaways Files & Folders	

	Completed	Your Notes
13	Excel Tables, Formulas & Pivot Tables	
	Overview: (Pivot) Tables & Formulas	
	Using Excel Formulas in VBA	
	Excel Tables: Use the Right Syntax	
	Pivot Tables & VBA: What you Need to Know	
	Activity: Update Existing Formulas with VBA by Adding IFERROR	
	Project: Update Existing Formulas with VBA by Adding IFERROR	
	Key Takeaways (Pivot) Tables & Formula	
14	Main Project #2: Regional Reporting Tool	
	What You'll Learn (& Should be Aware of..)	
	Project Overview: Regional Sales Reporting Tool	
	Importing Data from Multiple Files using MultiSelect	
	Setting up a Template as the Basis for Different Reports	
	Exporting Reports as Excel files (Pivot Table & Hard Coded Reports)	
	Fine-tuning Report Export Procedure (Double-check if user wants to overwrite)	
	Setting up Automatic Export of Text File (Fix delimiter in CSV to Semicolon)	
	Track the List of Tasks Completed with VBA	
	Final Touches & Creating Interface to Hide Specific Tabs with a Password	
	Key Takeaways & Tips for VBA based Excel Tools	
	Second Milestone Completed!	
15	Interacting with Other Applications (Word, PowerPoint etc.)	
	Overview & Important Concepts when Interacting with Other Applications	
	Project PDF: Save Specific Sheets as a PDF File	
	Project Email: Automatically Create Personalized Emails with Attachments	
	Project Microsoft Word: Create Personalized Letters in Word from Excel	
	Project Microsoft PowerPoint: Export Excel Sheets to PowerPoint Presentation	
	Key Takeaways when Working with other Applications	
16	Worksheet and Workbook Events	
	Overview & What are Event Procedures?	
	Workbook Events, Toggle Full Screen (Activate, Deactivate, Open, Close)	
	Worksheet Selection Change: Dynamic Font Color of Selected Range	
	Refresh PivotTables Automatically & Concept of Range Intersection	
	Resetting a Dependent Drop-down when the first Drop-down is Changed	
	Activity: Link Page Header to Cell Value (BeforePrint Event)	
	Project: Link Page Header to Cell Value (BeforePrint Event)	
	2 Useful Tips when Working with Events & Key Takeaways	
17	Working with Userforms & ActiveX Controls	
	Overview: UserForms & ActiveX Controls	
	ActiveX Controls: What you Need to Know	
	ActiveX Check Box to Fix Scroll Area & Toggle Screen Settings	
	ActiveX to Show and Hide Help	
	ActiveX Combo Box for Easy Sheet Navigation (Great for Larger Workbooks)	
	ActiveX to Show or Hide Other ActiveX controls (eg. Actual & Budget reporting)	
	UserForm Basics: What You Need to Get Started	
	UserForm for Data Entry (Input & Check Boxes)	
	UserForm to Document External Links & Comments (Combo Box & Option button)	
	Bonus: ListBox to Print Multiple Pages in ONE Go	
	UserForm Checklist & Course Map Status	
18	Main Project #3: Invoice Generation Tool	
	Tool Overview: What You Will Learn	
	Setting up an Input UserForm to Collect Master Data	
	Working with Multi-Column ListBoxes	
	Edit Master Data with UserForm	
	Searchable ListBox (with Selection Change event)	
	Enhanced Searchable ListBox: Write Selection back to Excel Table	
	MultiPage UserForm to Create Invoices & Email (Setup)	
	Export PDF & Excel Workbook for Each Invoice based on ListBox Selection	
	Create Email in Outlook & Attach PDF Invoice	
	Final Updates & Debugging	

	Completed	Your Notes
19		
Creating Customized Functions / Formulas		
Section Overview: Function Procedures		
Setting up a Simple Function (including Optional Arguments)		
Function to Calculate Age (Result in Years & Months)		
Functions that Split Text and Numbers from Cell Value		
Using Functions in Sub Procedures		
Activity: Function That Sums based on Cell Color		
Project: Function That Sums based on Cell Color		
Key Takeaways Function Procedures in VBA & Course Map Status		
20		
Working with Charts		
The Chart Object Library & Section Overview		
Create and Modify a Chart		
Animated Charts: Different Methods		
Show Charts inside UserForms		
Key Takeaways: Charts		
21		
Summary & Final Words		
Your Next Steps & more Learning		
BONUS Lecture		