



Understanding Excel VBA: Applications for the Financial Markets

Overview

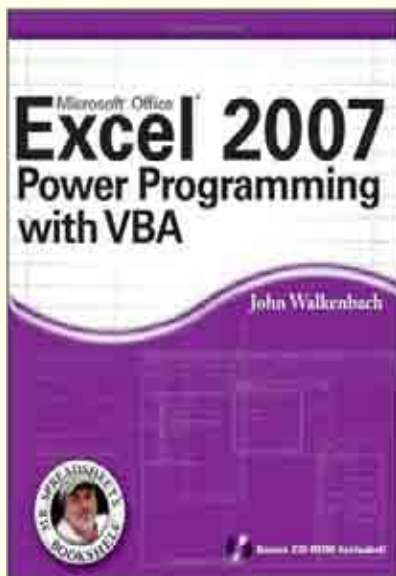
In this course, you will learn everything you need to know about Excel VBA. What makes this course different is that the applications used will relate to the South African Financial Markets.

Since the focus of the course is to learn Excel VBA, previous knowledge of the financial markets will not be necessary but will be useful. The presenter will briefly recap some of the financial markets sections relevant to the applications being developed.



Delegates will learn to automate workflow, manage large amounts of raw data and create dynamic reports using Excel VBA. This course is very **“hands on”**, so much so that you will be required to bring your own laptop and will be writing “code” from day 1.

It is now the norm for corporate employees who work regularly with spreadsheets to be able to use Excel VBA. In fact, it is often a requirement! In this course you will learn how to develop the South African pricing formulae using EXCEL VBA (amongst other applications).



As part of the course, all delegates will receive a textbook as course notes i.e. “Excel 2007: Power Programming with VBA” by John Walkenbach.

This textbook is often seen as the market standard when it comes to understanding Excel. This textbook is over 1000 pages and includes useful utilities and an electronic version of the book. This book retails for R754.95 including vat in South Africa!

Furthermore, Mark will include his own disk of applications as well as some additional course notes and slides covering all the aspects regarding the South African Financial Markets.

Please refer to the agenda for more info.

Geometric Progression is accredited as a provider of education and training by BANKSETA. Accreditation number: 557066.

We are a B-BBEE level four contributor. We have a B-BBEE procurement recognition level of 100%. The rating was performed by the Department of Trade and Industry (the DTI).

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Level: Introduction to Intermediate.

Duration: 3 days in total.

2 days consecutively followed by 1 follow up day. This allows delegates to digest the core material, practise some exercises before the last section of the course.

Prerequisites

- No previous knowledge of Excel VBA is required. You will start from zero and progress to the intermediate level.
- A Laptop with Excel 2007 or 2010 loaded on it.
- A basic understanding of spreadsheets.

A video and animation will be made available before the course to recap the basics of Excel and ensure all delegates understand the basic jargon with respect to using Excel. This includes ribbons, formulas, cell references, graphing and themes. Furthermore a brief video and pre-reading will also be made available for delegates regarding the financial markets focussing on the areas in which we will be developing applications.

Suitable for:

- Anyone who knows Excel but now needs to take the next step to speed up their workflow.
- Anyone wanting to automate buttons and create a graphical user interface.
- Anyone who wants to speed up calculations, automate workflow and create dynamic reports.

Who is this course not for?

- Anyone who does not know how to perform basic functions in Excel. For example, I would expect you to:
 - ◇ Understand what Excel is and how to use it.
 - ◇ Format cells, including colour, fill, data type e.g. currency, date etc.
 - ◇ Put together a basic spreadsheet that includes formulas e.g. autosum.
 - ◇ Access the formula bar and use some of the basic Excel built in Formulas.
 - ◇ Print, copy, paste, sort & name sheets.
 - ◇ Create a graph etc.

Excel 2007 will be used however reference and comparisons will be made to Excel 2010. PLEASE BRING YOUR OWN LAPTOPS. Due to limited numbers, booking early is essential! A certificate is available on request.

Cost

Early Bird: R5,750+ vat = R6,555

Normal Cost: R5950 + vat = R6,783

Early bird prices apply to any booking made more than 2 weeks before the course start date

Group Booking Discounts:

3rd delegate & more gets 5% discount . Available for delegates from one organisation attending the same course.

When: (JHB) : 08, 09 & 16th Sep 2011
(CT) : 18,19 & 24 Oct 2011

Venue (JHB): Glenhove Conference Centre, Melrose, JHB

Venue (Cape Town) : Top floor, Greater Westerford Building, 240 Main Road, Rondebosch.

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Agenda

1. Essentials of Spreadsheet Application Development

- Understanding how developers think.
- The difference between programming and modelling in Excel.
- The golden rules of programming and application development.
- The "dev" Interface i.e. The Visual Basic Editor.
- Understanding objects, properties and events.
- Understanding the object hierarchy.

2. VBA Programming Fundamentals Part I

- Understanding selection using code.
- Comments
- A quick look at bugs
- Variables, data types and constants
- Controlling code:
 - ◇ If - then
 - ◇ Select case
 - ◇ Nested conditions
 - ◇ Looping and nested loops:
 - ◇ For next
 - ◇ Do while, Do until
 - ◇ Nested loops etc.

Applications: We will learn the fundamental concepts using many useful "mini applications". We will also develop a money market calculator using VBA. Delegates will program all applications from scratch.

3. Errors and debugging

- Trapping and managing Errors;
- Breakpoints and Watches;
- The immediate window.

Mini applications will be used to demonstrate errors and debugging.

4. VBA Programming Fundamentals Part II

- Subs & Functions;
- Calling procedures;
- Passing Arguments;
- Scoping – Private, Public & Constants;
- Working with Strings and Dates;
 - ◇ Trimming and concatenation
 - ◇ Left, mid, right and case conversion
 - ◇ How Excel reads dates & Date functions
- The macro recorder;
- Fonts and Fills;
- With and end with.

Application: In order to demonstrate all of the above topics, users will develop numerous mini applications that are orientated towards the financial markets.



6. Active X Controls and Forms

- Forms
- Active X controls including:
 - ◊ Labels
 - ◊ Textboxes
 - ◊ Buttons
 - ◊ Combo Boxes
 - ◊ Radio Buttons etc
- Events and event driven programming
- Activation
- On-press
- On-click etc

Application: Delegates will create a Graphical User Interface (GUI) to create a self standing money market calculator.

7. Pricing South African Bonds

- A brief recap of the mathematics required to price bonds.
- Calculation of the All in Price, Clean Price, Accrued Interest.
- Broken Periods and books Closed Dates

Application and homework: Delegates will be able to choose to either automate the JSE bond pricing function or automate a financial report.

8. Working with Arrays

- Understanding arrays;
- Declaring Arrays;
- Re-dimensioning Arrays.

9. Some Handy tricks

- Dialogue boxes including message boxes and file open.
- Working with files.

Applications: We will import the files, and update our data repository. We will then write VBA code to automate the process.

10. Final project: Options & Exception reports

- Pricing Options using VBA
- Pricing Options on Futures using VBA.

Delegates will receive a video explaining the basics of options that are required for the course and all formula will be presented at the course.

Applications: Delegates can choose to either put together an option calculator or choose to automate an exception report.

Video and multimedia is used throughout the course to re-inforce concepts.



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Tutor: Mark Raffaelli CFA,FRM

Mark graduated with a Bachelor of Commerce from the University of Natal, South Africa in 1990. He is a CFA Charterholder and a member of the CFA Institute. He is also a fellow member of the Global Association of Risk Professionals (GARP) and has the Financial Risk Manager (FRM) qualification. Mark's extensive experience ranges from trading in Spot & Derivative Products and Consulting to the development of Risk Models, Pricing Software and Trading Systems. Those who have been to Mark's courses will know about his passion for the financial markets and ability to cut through jargon, simplify technical issues and provide real life examples. He has been nicknamed the "Steve Irwin of the financial markets".



What makes Geometric Progression different from other providers:

- We don't regurgitate traditional textbooks; instead we share real life experiences.
- We explain all the products as they relate to your own lives in plain English.
- We look at how the products are used by the professionals and how you could use them yourselves to make money.
- We are one of the few providers globally that also runs courses on the more intricate aspects of the financial markets e.g. stochastic mathematics, matrices etc.
- We love multimedia and include video and film in our courses.

We also offer practical training e.g. we teach people how to trade as if they were on the desk so that they get a turn to find out what it is like. Excel and computer examples are used where required.



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Terms and Conditions

Customer Information:

Fees include all the tuition, course file, lunches and refreshments for the duration of the course. Geometric Progression is not responsible for covering airfares or other travel costs incurred by registrants. Delegates will be responsible for their own accommodation and transport.

Disclaimer:

Geometric Progression reserves the right to change or cancel any part of the training courses due to unforeseen circumstances.

Cancellations:

If you cancel more than 10 working days before the course date, there is no cancellation fee. If you cancel between 2 and 10 days before the course date, a cancellation fee of 50% will be charged. Any cancellation less than 2 days before the course date will result in the full fee being charged.

Substitutions:

Registered delegates may be substituted at any time prior to the seminar without incurring any additional fee. Please inform Geometric Progression of the change.

Payments:

Payments must be made prior to the running of the event unless otherwise agreed with Geometric Progression.

Confirmation:

All registrations will be deemed confirmed and subject to these Terms and Conditions. Any disabled individual desiring auxiliary aid for this conference should notify Geometric Progression at least one week prior to the conference in writing, fax or email.

PLEASE NOTE:

Geometric Progression reserves the right to refuse admission where evidence of full payment cannot be shown. Should you require an original VAT INVOICE to requisition payment, please contact us on (0861) 000 615.

Geometric Progression reserves the right to cancel the course. Registered delegates will be notified and a full refund will be made.



Booking Form

Course: _____ Date of Course: _____

DELEGATE 1

First & Last Name: _____

Designation: _____

Company: _____ Department: _____

Tel: _____ Fax: _____ Cell phone: _____

Email: _____ VAT Registration No: _____

Postal Address _____

Special Dietary requirements (pls circle) None Kosher Halaal Vegetarian

DELEGATE 2

First & Last Name: _____

Designation: _____

Company: _____ Department: _____

Tel: _____ Fax: _____ Cell phone: _____

Email: _____ VAT Registration No: _____

Postal Address _____

Special Dietary requirements (pls circle) None Kosher Halaal Vegetarian

DELEGATE 3

First & Last Name: _____

Designation: _____

Company: _____ Department: _____

Tel: _____ Fax: _____ Cell phone: _____

Email: _____ VAT Registration No: _____

Postal Address _____

Special Dietary requirements (pls circle) None Kosher Halaal Vegetarian

Authorised By: Date:.....

Signature: