

# IFA/QFN VBA Tutorial Course Outline

## Objectives

VBA is important in financial industry, because its integration into Microsoft Office, especially Excel. You will probably need to use VBA if you go into a financial or insurance company. Therefore, knowing how to use VBA is a definite advantage for your future career.

Due to time constraints, I will not be able to give you a lot of details. You will need to read the reference books yourself, probably accompany with exercises, if you want to learn further. Learning computer related technologies is like this: First you encounter a problem. Then you need to find a solution to overcome your problem. So you scan through sections of reference books or browse the web to find possible ways to reach the solution. Next you come up with several possible ways to solution and you study the details. Finally you work out the solution. At this point you will have learnt a lot relating to your problem.

## Reference Books

(You can find them in the CUHK library website. Use VPN if you want to view them at home)

1. Definitive guide to Excel VBA, second edition [electronic resource] / Michael Kofler, David Kramer. / Berkeley, Calif. : Apress, c2003.
2. Microsoft Office Excel 2003 programming inside out [electronic resource] / Curtis Frye, Wayne Freeze, Felicia Buckingham. / Redmond, Wash. : Microsoft Press, c2004.

## Course Website

<http://ihome.cuhk.edu.hk/~b116672/vbaTuto>

## Course Schedules

There will be 8 lessons.

Date: 7 June 2008 – 26 July 2008, every Saturday; or 11 June 2008 – 30 July 2008, every Wednesday

Time: 2:00 – 5:00 pm

Venue: KHB 201 (BA PC Lab)

Lecturer: Wong Kin Lung Keith (email: [kinlwong@baf.msmail.cuhk.edu.hk](mailto:kinlwong@baf.msmail.cuhk.edu.hk), phone: 2609 7840)

## Topics covered

1. Recording and Running Macro 7 June 2008
2. Basic Visual Basic Programming 7 June 2008
  - A. Variables and Data Types 7 June 2008
  - B. Assignment Statements 7 June 2008
  - C. Conditional Statements 7 June 2008
  - D. Loop Statements 7 June 2008
  - E. Functions and Procedures 14 June 2008
  - F. Scope of Variables 14 June 2008
  - G. Arrays and Collections 14 June 2008
3. Object Orientated Visual Basic Programming 14 June 2008
  - A. Custom Data Types 14 June 2008
  - B. Classes and Objects 14 June 2008
  - C. Properties and Methods 14 June 2008
  - D. Scope of Classes, Properties and Methods 21 June 2008
  - E. Constructors and Destructors 21 June 2008
  - F. Inheritance and Overloading 21 June 2008
  - G. Events 21 June 2008
4. Error Handling 21 June 2008
5. Excel Object Model 28 June 2008
  - A. Application Object 28 June 2008
  - B. Workbooks and Worksheets 28 June 2008
  - C. Ranges and Cells 5 July 2008
  - D. Numerical and String Functions 5 July 2008
  - E. Dates and Times 12 July 2008
  - F. Formatting Excel Objects 12 July 2008
  - G. Files Import and Export 19 July 2008
  - H. Excel Events 19 July 2008
6. Simulation Techniques 26 July 2008
  - A. Simulating Normal Random Variables 26 July 2008
  - B. Simulating Severity Distributions 26 July 2008
  - C. Simulating Frequency Distributions 26 July 2008
  - D. Simulating Stock Prices 26 July 2008
  - E. Simulating Option Prices 26 July 2008