Advanced Financial Modelling in Excel (Online)

In the ever-changing business environment, being able to accurately model and forecast the volatile economic inputs is a critical skill for business professionals. Build on your existing modelling skills and apply new techniques to better analyse financial data, predict revenues and cost and assess risks to justify business decision in the most time-efficient and effective way.

Prerequisites

The course material includes extensive use of Excel and participants will gain the maximum benefit from this course if they are already competent spreadsheet users. It is designed for users who do use Excel on a regular basis, and are comfortable with using its tools and functions.

At minimum, it is assumed that participants will know how to:

- Navigate confidently in Excel
- Use absolute cell references (e.g. =A1)
- Create and use advanced Excel tools and functions on a regular basis

This course builds on students' advanced knowledge of Excel tools and functions and incorporates these into complex and dynamic financial models.

Methodology

Online courses consist of the following media:

- Instruction is conducted via online videos
- Step by step notes in PDF can be downloaded and printed or viewed on screen
- Exercise and sample Excel files can be downloaded
- Online quiz questions are available after every module

Students should watch the online videos, and they can follow along in the exercises in Excel.

Mini exercises do not need to be submitted, but the Factory Rollout Model needs to be completed and submitted to pass the course. After each module, participants must complete the quiz questions and submit their model. On successful completion of the course, a certificate of completion will be send via PDF.

Software used

The course is demonstrated using Microsoft Excel 2010, but students can use Excel 2003 or 2007 if they prefer. Course materials contain instructions for all versions, and Excel 2011 for Mac users are also catered for.

Course Content

Module 1: Financial Modelling Theory and Best Practice

- Choosing between Excel versions
- Overview of best practice financial modelling techniques
- Common Excel error values in financial modelling
- Correcting and suppressing errors
- Locating and fixing circular references
- Allowing iterative calculations when circular references are maintained

Module 2: Advanced Financial Modelling Tools and Functions

- Selecting the formula or tool which is most appropriate for each modelling situation
- Nesting formulas
- Useful functions in financial modelling such as COLUMN, CHOOSE, OFFSET, LOOKUP and TRANSPOSE
- Using LOOKUP functions in tiered pricing models (volume break discounting)
- Pros and cons of using array functions and their use in financial modelling
- Use of form controls such as spin buttons and combo boxes

Module 3: Advanced Financial Modelling Techniques

- Rebuilding an inherited model
- How long should a formula be? Deciding when to break a complex formula in several steps to maintain transparency and allowing ease of model auditing
- Comparison of different methods of modelling escalation and growth calculations
- Presenting model output using a chart on two different axes and chart types
- Creating a Waterfall Chart in Excel

- Pivot tables – summarise, dissect and analyse large amounts of data
- Why pivot tables are not commonly uses in financial modelling, and other alternative tools
- Automate your financial model for the user with Macros. Recording and modifying VBA code and creating macro buttons

Module 4: Scenarios and sensitivity analysis

Learn different methods of what-if, scenario and sensitivity analysis in Excel using:

- Show multiple scenario outcomes simultaneously with one and two-dimensional Data Tables
- Learn how to automatically highlight selected scenarios using complex conditional formatting
- Using the Scenario Manager
- Manual scenario building
  — In-cell drop-down boxes
  — Combo-box drop down boxes

Practical Exercise: At each step during the course, participants build and practice each formula, tool and technique. Record your own macro with buttons, build a pivot table, and create drop-down boxes.

Module 5: Practical Financial Modelling

Building on the tools and techniques covered, we will learn to apply advanced modelling skills to build complex, yet robust and user-friendly financial models.

Factory Rollout Model

Working on a startup funding model from start to finish we will evaluate input assumptions, calculate revenue and costs of production to calculate cash requirements. From this, we build a full set of financial statement with particular emphasis on linking the profit & loss statement, cash flow statement and balance sheet together.

Practical Exercises: Utilising the tools and techniques covered in the first part of the course, participants will build their own financial model case study, performing stress testing, scenario and sensitivity analysis on their model.

Comments from past students

Great course - well worth it. Wish I'd done this course years ago!

Danielle is a highly skilled, and engaging, presenter of Excel modelling techniques. I found the presentation to be both informative and highly relevant to my work as a financial analyst.

I thought I knew quite a bit but this course showed me more, and more importantly, better ways of doing things to make financial modelling easier. Learning more best practice techniques was invaluable.

This was a jam-packed course with practical content and very well-presented.