

Course Outline

Advanced Financial Modelling Course – 3 Days

Overview

This advanced financial modelling course shows participants how to build superior models by improving the reliability and quality of their Excel models. Financial modelling demands an organised approach, combining participants' financial skills with an excellent working knowledge of key Excel features and techniques.

On completion of this highly practical, hands-on workshop, attendees will be able to:

- build a financial model from a blank sheet
- design models which minimise errors
- write models using advanced Excel features
- develop models with advanced techniques such as sensitivity and optimisation

The course starts with an outline of modelling standards and methods and agrees the objectives for an integrated model. Each session reviews the next stage of the model in terms of the financial theory, modelling techniques and potential difficulties and participants build the model in stages. This is an intensive course and participants will be spending the majority of the time on practical model building tasks. With the help of the Course Director and through a proven step-by-step approach, participants will leave this intensive three-day course with the confidence and ability to apply advanced modelling techniques in Excel.

This programme will be delivered through a practical and interactive case study and worked examples, demonstrating how and why each technique is used. Participants will also benefit from formal lectures and group discussions. Comprehensive product notes and modelling software will be provided for future reference.

This course is relevant for all industry sectors with an interest in business and financial including:

- Financial Controllers
- Business/Financial/Treasury/Market Analysts
- Corporate /Structured/Project Finance Officers
- Financial/Strategic Planners
- Project/Commercial Management
- Business Development and Marketing
- Budget Managers
- Profit Centre Managers
- Credit Risk/Treasury Managers

Attendees need basic Excel skills to be able to participate fully in the modelling workshops. For example:

- Opening and closing Excel files
- Excel screen menu and standard toolbar
- Auto fill
- Moving around a worksheet
- Moving around the sheets in a workbook
- Creating files
- Deleting files and individual sheets
- Changing column width and row height
- Entering simple formulas
- Chart wizard
- Entering labels
- Cell referencing
- Centring titles and merging cells
- Simple cell formatting Number formats
- Changing font sizes and colours
- Copy, cut and pasting cell contents
- Inserting graphic objects
- Custom views
- Previewing worksheets
- Printing documents and ranges

It would be helpful if attendees on the advanced course had previously spent some time reviewing and experimenting with basic Excel functions and know how to insert functions. For example:

- Logic functions - IF, AND, OR
- Basic financial functions - NPV, IRR, NPER, RATE, PV, PMT, FV.

In addition, it would be helpful if course attendees had some basic finance knowledge for the modelling program such as:

- Present value
- Future value
- Nominal and compound interest rates
- Net present value
- Internal rate of return

If you are unsure of the application of financial functions, the most important of these are covered for you at <http://www.financialtrainingassociates.com/advanced-modelling-course/> under “sample modelling course material – financial maths”. You can use this material to check your knowledge prior to attending the advanced financial modelling course.

Course Content – Day One

The advanced financial modelling course builds up an investment or business case model through all key stages, to final reporting, over three days. Day one starts by reviewing current modelling practice and introducing a case study for the workshop. Sessions throughout the course then add features to the initial template, demonstrating the advantages of advanced modelling methods.

Session 1 – The right modelling style

- Introduction
- Modelling style
- Systematic design method
- Case study outline
- Model planning

Exercise: Reviewing and commenting on existing models

Session 2 – Getting the template right

- Setting up a basic template
- Layout methods
- Formats, numbers and colours
- Flexible timing and date functions
- Useful Excel techniques and shortcuts

Exercise: Starting an application template and setting up required sheets

Session 3 – Effective use of key revenue and cost data

- Operational revenue
- Volume drivers
- Counters
- Efficient coding techniques
- Fixed and variable cost
- Real and nominal considerations

Exercise: Plotting revenue and costs to gain initial gross margin

Session 4 – What's the margin?

- Operating margin
- Debt funding
- Fixed asset schedule
- Avoiding links and circular references

Exercise: Adding debt and asset schedules to generate income and balance sheet entries

Day Two

Day two builds on the workings and template from day one to produce accounting statements. The key answers required are net present values and internal rates of return together with sensitivity testing. The final session of the day includes an outline on auditing the model.

Session 5 – Getting the cash flow right

- Basic income and balance sheet
- Adding cash flow
- Cash flow schedule
- Model integrity and self-checks
- ISERROR functions

Exercise: Adding basic accounting statements with integrity checks

Session 6 – Calculating and interpreting the returns

- Accounting returns
- Terminal value
- Cumulative and simple discounting
- Single answer NPV, IRR, MIRR

Exercise: Calculating key model answers using different discounting techniques

Session 7 – Using sensitivity analysis correctly

- Common sensitivity errors
- Comprehensive scenario manager
- Sensitivity analysis
- Dashboard analysis

Exercise: Stress testing the model with sensitivity and what-if analysis

Session 8 – Does the model work? Auditing it

- Excel audit tools
- Checking current model
- Integrity checks
- Circular references
- Links
- Stress testing

Exercise: Framework for checking the model and finding errors

Day Three

Day three adds more Excel features and methods to the business template.

Session 9 – Macro introduction

- Recording macros
- Checking macros
- Amending macros

Exercise: Writing, recording, auditing and checking macros

Session 10 – Model Optimisation

- Using goal seek and solver
- Efficient use of optimisation

Exercise: Optimising model results against pre-determined criteria

Session 11 – How best to analyse and report on data

- LOOKUP functions
- Pivot tables
- Reporting tools

Exercise: Analysing data using Excel tools

Session 12 – Successful model completion

- Model documentation
- Printing
- Charts
- Executive summary

Exercise: Final model checks and reporting on the findings in the model