Excel Modelling and Analysis

Module A of the CinFM

Course Description

In this 3-day course, we cover the key concepts and methods required to plan, build and use financial models for decision support in business and finance.

Many Excel models are composed of building blocks that are quite common across many modelling applications. We cover these frequent logic structures and building blocks and the Excel formula to put these into place. In doing so, we cover a wide set of Excel functions, including Lookup, Logical, Date, Information, Text, as well as Excel short-cuts.

We learn key financial and economic concepts. These include methods to evaluate projects, the time value of money, discounting, return calculations, interest calculations, net present value, project evaluation, and others.

We explore the meaning of good decisions and the process requirements to generate them. We discuss the context of models, including methods to analyse economic context and business strategy, and to account for these appropriately within models.

We define the key questions that need to be addressed when planning a model. We cover tools and processes to map overall objectives into modelling requirements.

We cover the topic of sensitivity analysis and scenario analysis, and related areas. We cover a wide set of topics in modelling best practices to ensure that participants are aware and capable of building transparent, error-free and useful models.

A wide set of hands-on exercises are conducted as the course progresses. These are used not only to develop a robust knowledge of Excel, but also to reinforce the core concepts in economics, decision-making and best practices

This course is suitable for all levels, enabling early stage modellers to gain a wide set of skills, and more advanced modellers to extend and consolidate their knowledge and perspective.

Topics Covered

- Models as decision tools · The meaning of decision quality · Optimising decision support

- Excel essentials · Excel functions · Short-cuts

- Common logic and building blocks

- Model planning · Defining objectives · Mapping objectives to model design · Contextual analysis · Strategy analysis

- Performance measures · Economics of project evaluation · Break-even analysis · Payback periods · Time-value of money · Discounted cash flow · Net present value · Internal rate of return · Project evaluation

- Sensitivity analysis · Scenario analysis · Data Tables · GoalSeek

- Lookup functions · Logical and Information functions · Date and Text functions · Financial and Statistics functions · Array functions

- Interest rates · Compounding · Lease/buy decisions · Amortisation and mortgages

- Modelling best practices · Creating flexible and transparent models · Circular references · Named ranges · Optimising model layout

- Principles of effective visual communication · Results presentation · Graphs and charts

Learning Objectives

- Learn the common building blocks that cover most frequent Excel modelling requirements

- Enhance knowledge of a wide range of Excel functions

- Understand the elements required to make good decisions

- Learn how to analyse decision context to ensure models address all relevant areas

- Enhance skills in translating decision objectives into models

- Learn core concepts in economics and finance

- Understand key measures to evaluate projects, investments, and business performance

- Develop skills in sensitivity and scenario analysis

- Gain a better understanding of best practices in model design, building and use

- Learn key aspects of effective graphical communication

- Gain practical hands-on experience in building Excel model components and models

- Realize one's potential to work efficiently and effectively, and provide optimal decision support to your organisation