

Financial Analysis Certificate

Australia's premier Excel course for finance professionals

This course is designed for existing users of Excel or similar spreadsheet programs needing to vastly increase their modelling & analytical skills especially in the disciplinary areas of Finance, Accounting, Management & Procurement.



It is a unique & practical 48-hour hands-on course designed to improve the Excel modelling & analytical skills of finance professionals for the forecast, analysis & presentation of business & financial information.

Modes of Study

- In class mode: 48 hours over one month
- In residential mode: 56 hours over one week
- By distance learning: 48 – 72 hours over six to twelve months (see separate brochure)

Key Outcomes

- Significantly upgrade your modelling & analytical skills;
- 48 to 56 hours of continuing professional education for accountants;
- Learn proven methodologies & techniques to build more transparent & powerful models & reports whilst reducing complexity;
- Gain effective approaches to build robust sensitivity into models;
- Build a useful & effective framework for assimilating technical knowledge;
- Importantly – develop measurable improvements in accuracy, productivity & transparency!

The Course Delivers

- A thorough grounding in the tools & features available in Excel;
- Techniques to assist in auditing & understanding existing workbooks;
- Coverage of essential Excel functions for forecasting & financial analysis;
- Methods to generalise formulas for more dynamic & flexible calculations & analysis;
- Approaches to simplify calculations & increase the transparency of models & analyses;
- Practical guidance on the layout & structuring of workbooks for analysis & forecasting.

Who Benefits

- Financial modellers & those building valuation & forecasting models;
- Business Analysts responsible for forecasting & performance analysis;
- Accountants, finance managers & financial controllers budgeting & analysing business performance;
- Fund accountants & managers in equity & property funds;
- Financial advisers, public accountants, management consultants;
- Procurement, project planning & logistical staff responsible for financial & logistical planning;
- Managers responsible for their own analysis & forecasting;
- Post grad finance & MBA students from both financial & non-financial disciplines;
- Anyone who uses Excel to perform their role, looking to improve their productivity & accuracy.

Benefits for the Employer

- Direct & measurable improvement in staff productivity & a reduction in errors through good design;
- Standardisation of technique within workgroups is an important outcome;
- A number of our clients have made this course an integral part of their employee training & development programs & have reaped measurable benefits from the standardised techniques adopted;
- The very flexibility that is the principal attraction of modern spreadsheet products is the reason for shortcomings in design. A user must adopt & develop a strongly defined technique that enhances their efficiency, increases transparency & improves reliability. This course is not “just another Excel course”, it delivers on these requirements.

Testimonials

Most of these testimonials were offered some months after course completion, not just as polite feedback on the final day of the course.

- “During the six weeks since this course commenced, my models have evolved from complex and volatile to simple and efficient. Furthermore, I have been able to add a level of functionality that was hitherto unappreciated.” - Patrick H
- “I am writing to just let you know how much your course has helped me increase my productivity and add value to the work I do. With the learning’s from the course I can run various scenarios with so much ease. I have received appreciation from my manager and senior management as these models have really helped them in making informed business decisions” - Sameer M
- “I found this course incredibly helpful and would highly recommend it as a good investment of time and money to anybody requiring advanced skills in the use of Excel. It has been an invaluable resource with fantastic quality of course notes for later reference. As a business person involved in feasibilities, computer modelling, due diligence etc and in my work as a Chartered Accountant and Licensed Real Estate Agent, it has certainly been very helpful” - Rob E
- “This course is not just about "Formulas". James challenges our entrenched way of building models through technique and planning. A tremendous value-add for any employee using Excel!” - John E
- “James has a passion for his subject which he effectively communicates to his students. This course has the potential to be very dry but James keeps it interesting and relevant. Few courses achieve what they claim in their promotions however this course exceeded my expectations and was excellent value.” - Jim R

Detailed Course Outline

Key Techniques for Model Building

- Guidelines for effective model layout
- Guidelines for improving model and analytical clarity & reducing complexity
- Handling assumptions & designing for powerful & effective sensitivity analysis
- Model segregation

Sensitivities

- Setting up workbooks to enable sensitivity analysis
- Methods to implement sensitivity analysis
- Sensitivity analysis using Data Tables
- Sensitivity models with tables of scenarios
- Dynamic reference sensitivity solutions
- Placement of data tables on any worksheet
- Multi-variable data tables

Formula Building

- Building formulas robustly
- Developing productive and error-averse formula entry techniques
- Pointing techniques to reference ranges & avoid errors
- Tools for building & interpreting formulas
- Important shortcuts for formula building
- Formula view, finding inconsistent formulas

Understanding Formulas

- Understanding Excel expressions (formulas) and how they are evaluated
- Excel operators and their precedence
- Relative, mixed, absolute & multi-sheet addressing; A1 versus R1C1 addresses
- Expression nesting and managing complexity
- Identifying & implementing the appropriate function to solve problems
- Formula building techniques to reduce referential errors
- Range, Union & Intersection operators
- Data types & conversion
- Understanding array formulas
- When to use array functions
- Alternatives to array formulas
- Understanding ambiguous & generalised references

Keyboard Techniques

- Accessing ribbon controls, context menu commands, ranges, dialog boxes etc.
- Navigating and selecting ranges, sheets, objects, chart elements
- Range selection for formula entry, and during formula entry

Working with Names

- Understanding names
- Working with names
- Defining, creating and editing names
- Documenting names
- Guidelines for the use of names - when and when not to use names
- Effective naming techniques
- Creating dynamically defined names
- Alternatives to naming ranges
- Use of names to improve workbook links
- Working with names in formulas

Conditional Expressions

- Logical expressions & logical operators
- Use of trigger & switch expressions
- Use of IF() to handle conditional logic
- Use of CHOOSE() to handle conditional logic
- Use of “Product of Comparison” formulas
- Replacing IF() with alternative, less complex solutions for conditional logic
- Handling complex, multi-step conditions
- Simplifying date-sensitive logic
- Implementing conditional formatting to identify errors, mismatches, duplicates
- Logical expressions in array formulas
- Alternatives to AND() and OR()

Lookup and Referencing Formulas

- Use of VLOOKUP(), HLOOKUP()
- Use of MATCH(), INDEX() to more flexibly reference data and ranges
- Exact match & threshold match type lookups & when to use each
- Dealing with discontinuities and conditional logic using lookup tables
- Use of OFFSET(), INDIRECT(), INDEX() and CHOOSE() to dynamically reference ranges
- Building dynamic name definitions to be sensitive to data
- Use of ROW(), COLUMN(), ROWS(), COLUMNS(), ADDRESS() and CELL() in referential formulas to locate values
- Use of & issues with GETPIVOTDATA()
- Using choices in drop-down boxes to dynamically access data / settings / assumptions
- Alternatives to lookup formulas

Workbook Linking

- Building safe links using range names & the intersection operator
- Understanding link resolution
- Locating & removing invalid links

Working with Dates & Times

- Understanding Excel’s date & time functionality
- Date & time functions available in Excel
- Building date & time triggers for models
- Apportionment between financial periods
- Sensitivities dependent upon action dates & timing of transactions
- Robust solutions to deal with common but difficult calendrical calculations
- Simplifying date and time logic which is a common source of complexity in many models
- Calculating financial year, financial quarter, recurrent dates, maturities
- Forecasting cyclically
- Date & time custom number formatting & related issues
- Converting to & from date & time values

Financial Functions

- Annuity cash flow functions PMT(), RATE(), NPER(), PV(), FV(), IPMT(), PPMT()
- Discounted cash flow functions IRR(), XIRR(), NPV(), XNPV()
- Statistical / forecasting functions SLOPE(), INTERCEPT(), RSQ(), TREND(), FORECAST()

Data Type & Conversion Functions

- Information functions explained incl. ISBLANK(), ISNUMBER(), ISTEXT()
- Type conversion functions incl. TEXT(), VALUE(), DOLLAR(), FIXED(), DATEVALUE()
- Coercion of data type by operator

Summary & Analysis using Formulas

- Formulas to identify & analyse matched, duplicate, missing or unique entries
- Summarising data using standard formulas
- Summarising data using array formulas
- Summarising data using database formulas
- Database functions, advantages & limitations
- Ranking & sorting data using formulas
- Techniques for building consolidated reports
- Transposing ranges using array formulas
- Transposing ranges using standard formulas
- Database functions DSUM(), DMAX(), DCOUNT(), DAVERAGE() to summarise data with complex criteria
- Using SUMIF(), SUMIFS(), COUNTIF() and COUNTIFS() & SUMPRODUCT() to summarise data with complex criteria
- Basic statistical functions
- Building frequency distributions with FREQUENCY()

Summary & Analysis using Tools

- PivotTables & accessing summarised data from pivot tables for reporting
- PivotTable settings
- Building calculated fields in PivotTables
- Building calculated items in PivotTables
- Consolidation via PivotTables
- Data subtotalling
- Group & outline & associated settings and shortcuts
- Filtering & sorting records
- De-duplicating data
- Sorting by colour
- Working with text, CSV and data files
- Parsing text ranges
- Icon sets, colour scales & data bars using conditional formatting

Sample Reports & Financial Techniques

- Cyclic cash forecasts
- Forecasting costs and cash flows using S Curves
- Discounted Cash Flow calculations
- Financial distress forecasting using Z scores
- Monitoring financial performance using the DuPont model
- Developing a planning model including assumption tables & incorporating changes

Formatting

- Understanding & using styles to build effective, manageable workbooks
- Key settings to improve workbook layout
- Using custom number formatting to control appearance of models
- Advanced custom formatting
- Conditional formatting
- Understanding Office themes
- Page layout settings
- Using and formatting shapes
- Working with linked text objects

Interface Design

- Data validation & creating in-cell drop-down boxes
- Utilising values from in-cell drop-down boxes & applying default values
- Embedded controls for managing dynamic lists, based on user selections
- Use of Styles for consistent layout & aiding end-user interaction
- Hyperlink Index worksheet for a standardised index to workbook content

Model Deployment and Security

- Housekeeping & security
- Cell, scenario, object security settings
- Worksheet & workbook security
- Issues around distribution of models
- Understanding styles
- Development of templates, incorporating standard content & predefined styles
- Adding hyperlink indexes to workbooks
- Template title pages
- Using hyperlinks to link documentation to deployed workbooks and templates

Working with Lists and Filling Ranges

- Understanding AutoFill
- Advanced filter
- Sorting, including sort by colour & custom lists
- Sorting shortcuts
- Re-ordering rows and columns
- Pick from list keys and settings
- Autocomplete settings
- Paste special settings
- Excel Tables

Formula Errors

- Understanding the Excel error types
- Errors generated by ambiguous references
- Identifying & handling formula errors
- Identifying & handling data type errors
- Identifying & handling calculation errors
- Use of built-in functions to bypass errors rather than tortuous nested IF() functions
- Errors aren't all bad – making use of errors
- Use of ISNA(), ISERR(), ISERROR(), ERROR.TYPE(), IFERROR(), IFNA() to manage errors
- Use of VALUE(), TEXT(), N(), T(), SUM() & information functions to avoid data type mismatch errors
- Formatting errors
- Reducing the complexity engendered by formula errors, alternative approaches
- Background error checking

User Errors

- Building-in cross checks to identify data inconsistency & user errors
- Building-in defaults to avoid errors
- Identifying errors using conditional formatting & styles
- Useful custom formatting to present cross-checks & errors
- Identifying out-of-order lookup tables

Workshop Exercises

- A set of review exercises are worked at regular intervals throughout the course that require the students to work in groups to implement the knowledge gained in solving the problems set.
- Commentaries and sample solutions are provided to the students for the review exercises. The results of these exercises are critiqued in class & alternative approaches to solving these problems are canvassed.
- Final assessment (optional for in-house courses) is based upon a longer workshop during which the students working in groups demonstrate their knowledge & analysis skills through solving a set of problems based around the materials covered. Note: Sample solutions and commentaries are not provided for the assessed questions.

Public Courses

Public offerings of the Financial Analysis Certificate are available in Sydney, Melbourne, Brisbane, Adelaide & Perth. For details, visit our web site (www.clarksonitt.com/calendar) or call +61 (0) 417-777-750.

Residential Mode Courses

We run some of the public offerings in residential mode. These more intensive sessions are suitable for those who would like to focus on the training & complete it in a concentrated period of study. It also makes it easier for remote students to attend a course that is completed over one week, reducing travel time and costs. Day-only students are welcome at all residential mode courses. They also offer opportunities for extra one-on-one coaching.

Private Courses

In-house offerings of the Financial Analysis Certificate can be arranged anywhere in Australia and we can assist with the hire of suitable training facilities if they are not available in-house. Requirements for in-house facilities are discussed on our web site. For a quotation or to discuss your particular needs, call +61 (0) 417-777-750.

About the Course Author and Lead Presenter



Following an early career in both public and commercial accounting, James Clarkson has more than twenty-five years' experience as a presenter of professional programs and more than thirty consulting & model building for corporate clients.

He has gained wide experience in model & analytical report design & development and also has wide experience in application development using Microsoft Office (especially Excel), Visual Basic & Visual Basic for Applications (VBA).

He is an outstanding educator, demonstrating the ability to clearly explain difficult and technical subjects and consistently rates above 90% for satisfaction across a number of measures on student evaluations.

Financial Analysis Certificate Extension Program



In 2016, the first offerings of the new Financial Analysis Certificate Extension Program have been launched. These are two-day workshops that focus on key areas of advanced modelling and business analysis, including the new PowerPivot and Power Query add-ins for Excel. They are open only to those who have completed the Financial Analysis Certificate.

Excel Version

- The course materials are fully compatible with all versions of Excel from Excel 2007 to Excel 2013. Version specific instructions are given where these vary between versions.
- Public courses are conducted using Excel 2010
- Some keyboard shortcuts taught are not available in the Macintosh versions of Excel (2008, 2011) but all formulas and techniques are applicable to the Macintosh, although some of the productivity tips are difficult to implement on that platform.

Course Materials

- The course materials include a 300+ page course text & a 24 page ready reference
- A full set of blank and worked sample workbooks as well as a number of reference documents are available for download online.