

## Practical Financial Modeling: 2 Days

**Delegate Profile:** This course is targeted at delegates who are new to modeling. They may have already built simple models to analyze data and financial statements, however, are seeking to learn how to use excel functions and best practices in model design. In addition, the course is helpful for delegates who regularly review models and their outputs, and want to gain an insight into how they are built on an integrated basis.

### Key Learning Outcomes

- Delegates will learn common excel functions which are used in financial modeling and data management
- They will learn best practice techniques in how to build an integrated investment appraisal model from scratch and determine Net Present Value, IRR and payback period
- They will gain a greater insight into how the three financial statements are interlinked, and the key value drivers that generate free cash flow.

**Pre-requisite Knowledge:** No prior knowledge of excel or modeling is assumed, however, delegates should already be familiar with the key line items within financial statements (profit & loss, balance sheet and cash flow).

**Our Approach:** The course is very 'hands-on' and based entirely in excel. Each delegate should be provided with a laptop, which is pre-loaded with all the materials in excel format. (Note: the course may be delivered in either Excel 2003 or 2007, however, all delegates should use the same version of excel in the training room.) We facilitate the learning process through a combination of:

- Short 'single worksheet' exercises to demonstrate how excel functions may be applied in financial modeling and database management
- An integrated investment appraisal model for a new commercial project, which delegates build over ten progressive stages and derive Net Present Value, IRR and Payback Period
- A one page summary sheet, as a take away and reminder of the key excel functions and best practice model design

**Training Fees:** £5,000 plus VAT. This covers all research, design and delivery of the training by James Gilpin, for up to 12 delegates. (Note that a smaller delegate group is necessary for financial modeling training)

**Expenses:** All incremental travel and accommodation expenses will be charged separately, however, we will work hard to ensure all costs are kept to a minimum. With regard to materials, JGFT can provide all materials electronically, which must be loaded onto delegate laptops in advance of the course.

## **Day One**

### **Session 1**

#### **Excel Basics**

- Navigating the keyboard, cutting, copying and pasting: Using more keyboard and less mouse
- Using Names and Range Names
- Using IF functions and Nested IF functions
- Number, Date and Percentage formats
- Absolute and Relative references

### **Session 2**

#### **Designing a Financial Model**

- Defining objectives for your model and designing a flowchart
- Input, Workings and Output worksheets
- Creating Operating, Investing and Financing Assumptions and Using Names
- Sources and Uses of Funds

### **Session 3**

#### **Building the Operating Schedules**

- Revenue, Costs (Fixed and Variable) and EBITDA
- Working Capital (Inventory, Receivables and Payables)

### **Session 4**

#### **Building the Fixed Asset Schedule**

- Using the Offset function
- Calculating Depreciation using straight line or reducing balance methods
- Accounting for Disposals with/without residual values
- Simple capital allowance calculations

### **Session 5**

#### **Financing Functions**

- Interest Expense calculations using opening vs. average balance methods
- Overcoming circularities
- Debt Repayment and Servicing functions (PMT, PPMT and IPMT)
- Building a cash waterfall with cash surplus vs. revolving credit facility

## Day Two

### Session 1

#### Building the Financing Schedule

- Debt Repayment worksheet (amortising vs. bullet repayments)
- Cash sweeps
- Credit Ratios: liquidity, solvency and fixed charge coverage
- Determining headroom/shortfall and peak borrowing requirement

### Session 2

#### Building the Taxation Schedule

- Current taxation
- Accounting for losses and deferred taxation
- Tax shield on interest expense

### Session 3

#### Completing the Financial Statements

- Balance sheet, Income Statement and Cash Flow
- Balance Sheet checks

### Session 4

#### Discounted Cash Flow

- Deriving NOPLAT (top down vs. bottom up)
- Adjustments to derive Free Cash Flow
- Time Value of Money formulae (discounting and perpetuities with/without growth)
- Determining the discount rate (WACC)
- Determining the terminal value (with/without growth)
- Calculating NPV, IRR and Payback
- NPV and XNPV function
- IRR and XIRR function

### Session 5

#### Examining Sensitivities and Scenarios for the Model

- List box, Match and Choose function
- Combo box and Choose function
- Goal Seek, Data Tables and Scenarios Manager
- Incorporating Data Tables and Scenarios to examine sensitivity of outputs
- Camera function
- Print Management