



Corporate Finance Institute®

Financial Modeling & Valuation Analyst (FMVA)

Program Overview

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# CFI Program in Financial Modeling & Valuation

Corporate Finance Institute® (CFI) is a leading financial analyst training company that provides career-focused financial modeling and valuation courses. CFI's courses and certifications have been delivered to tens of thousands of individuals at the top universities, investment banks, accounting firms and operating companies in the world.

Whether you are new to the corporate finance industry or an experienced professional, CFI training on **financial modeling and valuation** will help you master new skills, achieve professional goals, and advance your career.

CFI courses are designed to provide you with **in-demand industry knowledge, hands-on practice, and confidence** that will help you stand out from competition and become a world-class financial analyst.

By following CFI's **blueprint for professional success**, you will learn the best practices, tools, and techniques to master financial modeling, company valuation, discounted cash flow (DCF) analysis, merger models (M&A), sensitivity analysis, accounting fundamentals, financial statement analysis, and much more.

This professional training program will help you gain **on-the-job skills and knowledge** that might otherwise take years of hands-on experience to learn.

Trained by globally experienced instructors, graduates complete our analyst program with new knowledge and skills essential for successful careers in corporate finance, investment banking, equity research, corporate development, FP&A, treasury, and accounting.

## At a Glance

-  **100 hours**
-  **22 financial analyst courses (12 required)**
-  **15+ financial model templates**
-  **\$497 USD**
-  **100% online**

43,188

Students enrolled in 2017

110+

Countries

20+

Average years of instructor experience

# Program Overview

Ready to advance your career? Join tens of thousands of professionals who demonstrate a commitment to the field and dedication to continuous improvement of their corporate finance skills.

We understand the critical importance of time in business today and are pleased to offer **flexible online training** that allows you to complete the courses at your own pace in a timeframe that's convenient for you.

CFI has created a thorough step-by-step curriculum that covers financial modeling, valuation, and financial analysis topics — from introductory to intermediate and advanced levels (levels 1, 2 and 3).

Our financial analyst training program is suitable for students of various professional backgrounds and is designed to teach you everything from the bottom up. By moving through the three levels of mastery, you can expect to be performing **industry-leading corporate finance analysis** upon successful completion of the courses.

## Start your program

- ✓ Become a Financial Modeling & Valuation Analyst (FMVA)
- ✓ Learn at your own pace, 100% online

## What you'll learn:

- ✓ Accounting, finance, and financial analysis
- ✓ Financial modeling and business valuation
- ✓ Presentations, charts, and graphs
- ✓ Advanced Excel skills

## What you'll gain:

- ✓ CONFIDENCE in your career
- ✓ KNOWLEDGE of advanced material
- ✓ SKILLS for the real-world
- ✓ EXPERIENCE performing real analysis



### 100% Online

The same content taught at global banks, with the flexibility to go at your own pace



### Practical

Interactive courses, case studies and exercises from industry-leading instructors



### Career-Focused

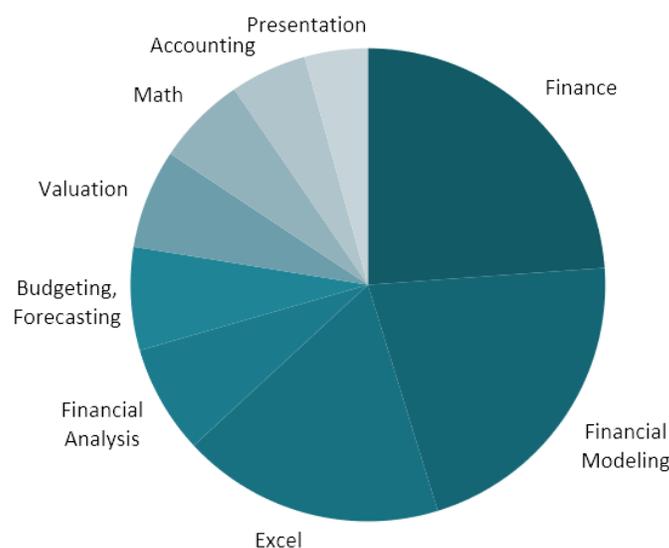
Practical applications in Excel and PowerPoint to give you skills that can be applied to your career right away

# Curriculum

CFI classes are offered 100% online, allowing you the flexibility to start the financial analyst program, set your own schedule, and study at a time that's most convenient for you.

The analyst program includes **7 optional prerequisites** to review the fundamentals, **9 core courses** (all required) to build a strong foundation in financial modeling and valuation, plus a minimum of **3 elective courses** that allow more focus on specific topics and skills (**12 required courses in total**).

This program will require between 50 and 100 hours of study to master the course content and complete the exercises, quizzes and final assessments. You will learn from a variety of methods, including recorded video lectures, hands-on exercises, quizzes and multiple-choice tests.



Topic	Topic Weight
Finance	24%
Financial Modeling	21%
Excel	18%
Financial Analysis	7%
Budgeting, Forecasting	7%
Valuation	7%
Math	6%
Accounting	5%
Presentation	4%
	<b>100%</b>

# Graduation Requirements

To be granted the **Financial Modeling & Valuation Analyst (FMVA)** credential from the CFI Program, students must successfully complete all required and elective courses (12 in total) and demonstrate mastery of the topics through completion of the course materials, quizzes, and assessments.

Students must earn a minimum **passing grade of 80%** in each course assessment to complete the requirements for the program and receive certificates of completion.

# Optional Prerequisites



Course Name	Course Code	Recommended Study Hours
Accounting Fundamentals	CFI 101	1-3
Reading Financial Statements	CFI 102	1-3
Fixed Income Fundamentals	CFI 103	1-3
Excel Crash Course for Corporate Finance	CFI 104	1-3
Introduction to Corporate Finance	CFI 105	1-3
Math for Corporate Finance	CFI 106	1-3
Financial Modeling Fundamentals	CFI 107	1-3
Financial Models & Templates Library	CFI 099	N/A

## Core Courses (9 required)



Course Name	Course Code	Recommended Study Hours
Financial Analysis Fundamentals	CFI 108	2-4
Building a Financial Model in Excel	CFI 201	2-4
Business Valuation Fundamentals	CFI 202	2-4
Budgeting and Forecasting	CFI 203	2-4
FP&A Monthly Cash Flow Forecasting	CFI 204	2-4
Behavioral Finance Fundamentals	CFI 205	2-4
Scenario and Sensitivity Analysis	CFI 301	2-4
Advanced Excel Formulas	CFI 302	2-4
Dashboards & Data Visualization	CFI 303	2-5

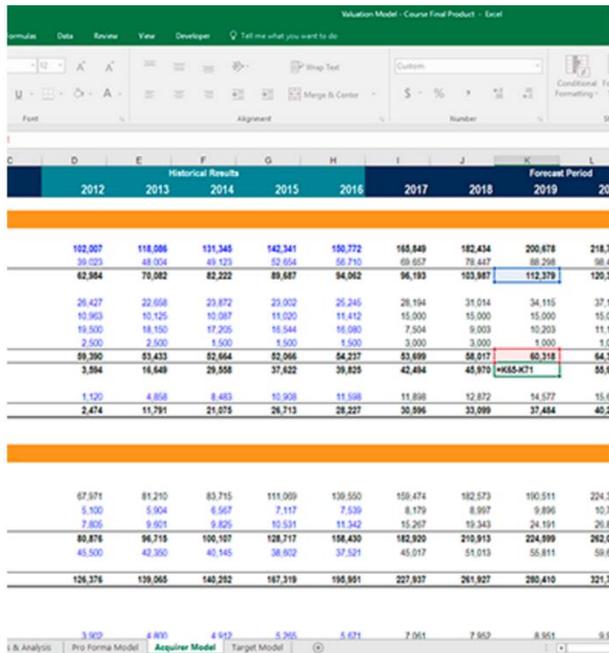
## Elective Courses (3 required)



Course Name	Course Code	Recommended Study Hours
Real Estate Financial Modeling	CFI 304	4-8
Startup / e-Commerce Financial Model	CFI 305	4-8
Mining Financial Model & Valuation	CFI 306	4-8
Mergers and Acquisitions (M&A) Modeling	CFI 307	4-8
Financial Modeling with VBA	CFI 308	2-5

# Learning Objectives

The CFI Program covers a critical body of knowledge necessary for becoming a world-class financial analyst. The core curriculum for the program includes:



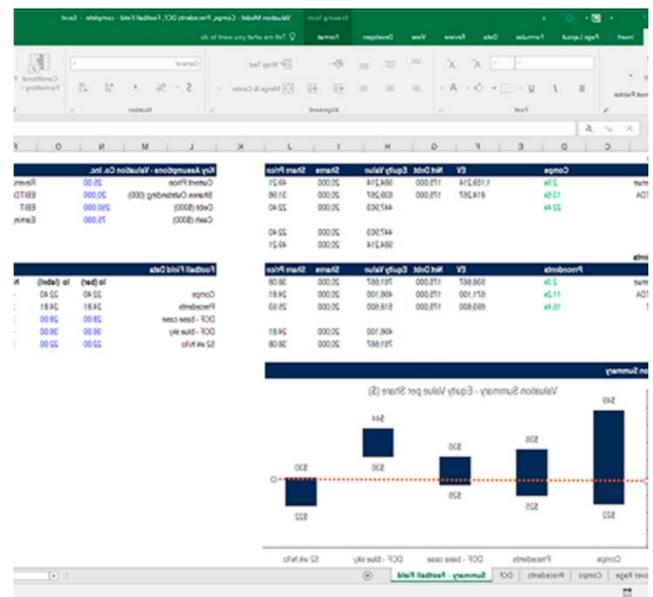
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Revenue	102,007	118,086	131,345	142,341	150,772	165,849	182,434	200,678	218,711
Operating Expenses	36,023	48,004	49,123	52,654	56,710	69,657	78,447	88,298	98,411
Operating Profit	65,984	70,082	82,222	89,687	94,062	96,193	103,987	112,379	120,300
Interest Expense	26,427	22,058	23,872	21,002	25,246	28,194	31,014	34,195	37,311
Income Before Tax	13,557	10,125	10,087	11,020	11,412	15,000	15,000	15,000	15,000
Income Tax	13,557	10,125	10,087	11,020	11,412	15,000	15,000	15,000	15,000
Net Income	0	0	0	0	0	0	0	0	0
Free Cash Flow	3,584	16,649	29,558	37,822	39,825	42,484	45,870	48,511	51,111
Capital Expenditures	1,120	4,858	8,483	10,908	11,658	11,838	12,872	14,577	15,811
Change in Working Capital	2,474	11,791	21,075	26,713	28,227	30,646	33,099	37,484	40,211

## Financial Modeling

- ✓ Develop industry-leading best practices for layout, design and structure of models
- ✓ Learn how to build a dynamically linked 3-statement model in Excel from scratch
- ✓ Create a multi-year forecast to project the income statement, cash flow and balance sheet into the future
- ✓ Use advanced Excel formulas and functions to make models both robust and dynamic
- ✓ Perform scenario analysis, sensitivity analysis, accretion/dilution analysis and other advanced modeling practices
- ✓ Learn how to build models that are well designed, intelligently structured, and easy for other users to work with

## Valuation

- ✓ Learn how to value a company using comparable company analysis, precedent transactions, and discounted cash flow DCF modeling
- ✓ Build numerous DCF models from scratch in Excel and learn how to calculate a firm's weighted average cost of capital
- ✓ Understand how and when to use Enterprise Value and Equity Value multiples for valuation
- ✓ Learn about the pros and cons of different valuation methods, and become proficient in all of them
- ✓ Arrive at a range of values for a business combining multiple methods

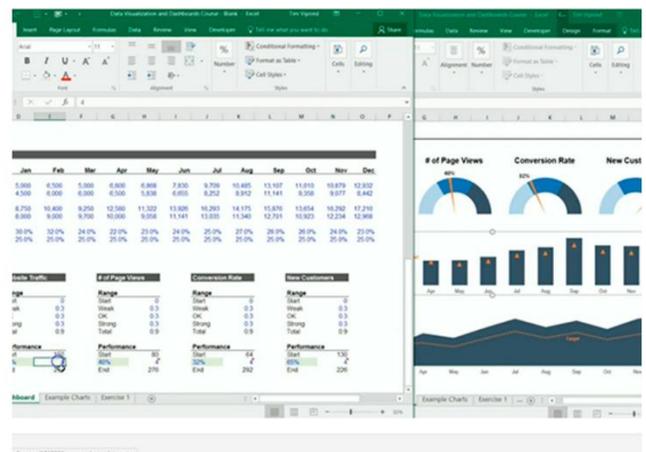


## Financial Analysis

- ✓ Learn advanced forms of financial analysis including ratios, rates of return, risk assessment, credit metrics, debt schedules, cash flow waterfalls and more
- ✓ Assess the overall attractiveness of investment opportunities using financial models, scenarios, and multiple types of analysis
- ✓ Develop insightful and charts and graphs for PowerPoint presentations
- ✓ Build Excel dashboards and use advanced data visualization techniques
- ✓ Go beyond the financial model to truly understand the risks and opportunities of an investment opportunity

## Presentations

- ✓ Learn to create beautiful charts, graphs and tables in Excel
- ✓ Build professional PowerPoint presentations and pitch decks
- ✓ Create insightful dashboards and outputs for presentations
- ✓ Learn how to use data visualization to get your point across
- ✓ Impress executives and leadership teams with deep insights and impactful presentations



When you graduate from the program, you'll be able to:

- ✓ Emerge with superior CONFIDENCE and BUSINESS SKILLS
- ✓ Have better CAREER OPPORTUNITIES available to you
- ✓ Be more DESIRABLE in the eyes of HIRING MANAGERS and recruiters

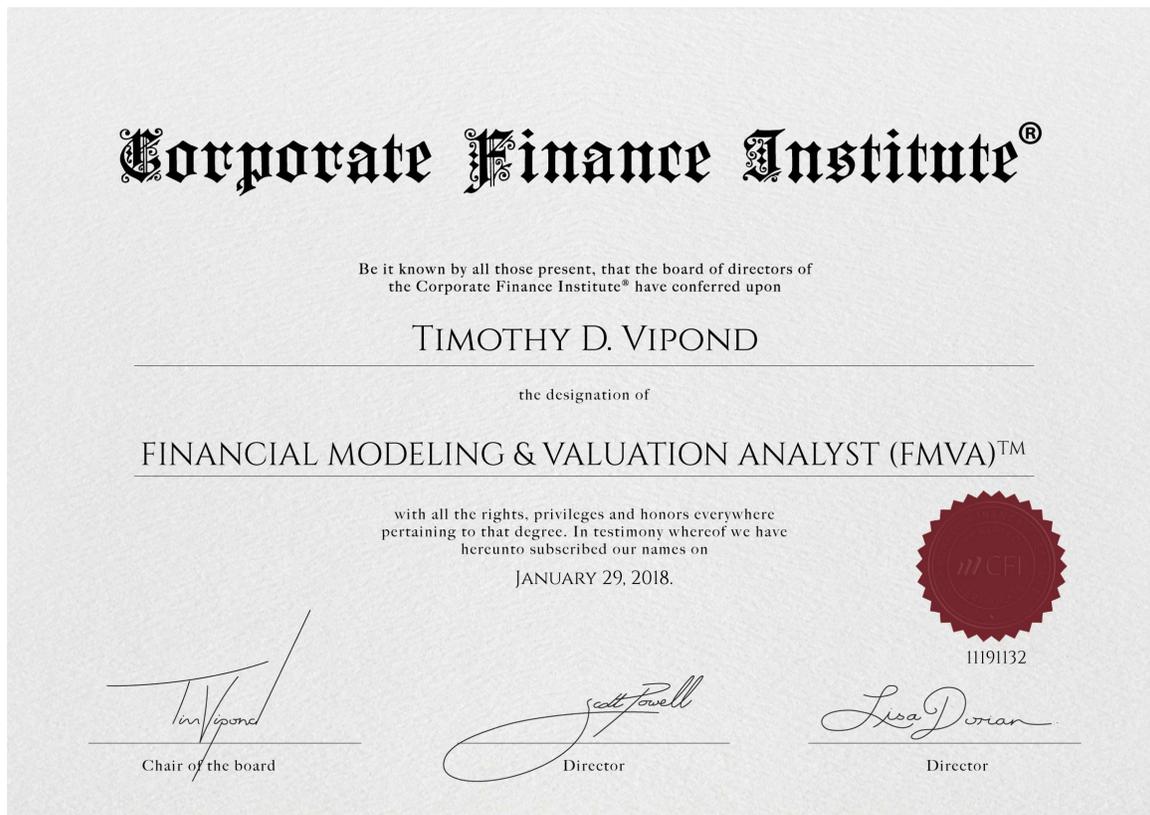
# Why Certification is Necessary

In a highly demanding job market, it is critical for you to gain a competitive advantage through professional development and industry-oriented certifications.

As financial analysis practices and business tools evolve at an ever-increasing rate, a gap is formed between the foundation provided by postsecondary institutions and the **on-the-job competencies required in today's business environment.**

The CFI Training Program and certification were established to pick up where traditional schooling leaves off and bridge this education gap.

A certification from CFI on your resume gives recognition of competence, demonstrates a commitment to ongoing professional development, and helps with job advancement.



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# Technical Requirements

- ✓ An Internet connection is required to take this program, including the ability to play audio as courses include voice lectures

CFI strongly suggests that students have the following technology in order to successfully complete projects and assignments online:

- ✓ PC or Mac
- ✓ Familiarity with basic Internet applications (email and web browser)
- ✓ A recent version of Microsoft Internet Explorer, Firefox, Chrome, Safari or another web browser
- ✓ An updated version of Microsoft Excel (2010 or more recent)

# Tuition

\$497 CFI FULL PROGRAM – Lifetime access to all courses – “Financial Modeling & Valuation Analyst (FMVA)”  
PICK AND CHOOSE – Individual courses and pricing

The CFI Program can be purchased all at once or on a course-by-course basis. All fees are in US dollars and are subject to change.

Program fees may be paid by Visa®, MasterCard®, PayPal, money order, certified check or wire transfer.

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# Accounting Fundamentals

This two-part series will guide you through the accounting process, exploring the layout of the balance sheet, income statement, and cash flow statement, and demonstrating how to prepare financial statements from scratch. This course incorporates a wide range of applied exercises and case studies.

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## **MODULE 1 - CONSTRUCTING A BALANCE SHEET AND INCOME STATEMENT**

1. Explain the format of the income statement and balance sheet
2. Define various financial statement terms (e.g. accounts receivable, prepayments, etc.)
3. Record financial statement transactions (e.g. invoicing, raising equity, buying inventory, etc.)
4. Prepare a simple income statement and balance sheet

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## **MODULE 2 - CONSTRUCTING A CASH FLOW STATEMENT**

1. Outline the format of the cash flow statement
2. Explain the difference between profit and cash
3. Prepare a simple cash flow statement using the balance sheet and income statement

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# Reading Financial Statements

In this two-part course, we use a published set of financial statements and annual report to understand the financial strength of a company and help us to make informed decisions.

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## **MODULE 1 - UNDERSTANDING THE BALANCE SHEET**

1. Navigate successfully through the notes to the financial statements
2. Read and interpret the various items in a published balance sheet
3. Understand complex balance sheet concepts (e.g. deferred taxes, goodwill, investments, etc.)

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## **MODULE 2 - UNDERSTANDING THE INCOME AND CASH FLOW STATEMENTS**

1. Understand the different ways to present an income statement and cash flow statement
2. Read and interpret the various items in a published income statement
3. Identify the operating, financing, and investing activities of a company
4. Determine what's contained in an annual report and where to find it

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# Fixed Income Fundamentals

This 2-part series will introduce you to the main products and players in the fixed income markets. It illustrates the points covered using real market data and examples of the most commonly used Bloomberg screens for bonds. Core concepts such as bond pricing, duration and yield curves are covered in detail. This course incorporates a wide range of applied exercises and case studies together with quizzes to test what you are learnt.

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## **MODULE 1 - FIXED INCOME PRODUCTS AND MARKETS**

1. Learn the key features of fixed income securities & bonds
2. Understand the yield curve and what it represents
3. Track yield curve changes throughout the economic cycle

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## **MODULE 2 - PRICING FIXED INCOME SECURITIES AND DURATION**

1. Use DCF to price bonds
2. Learn the relationship between bond prices and yields
3. Use duration to learn how bond prices move in the market

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# Excel Crash Course



Learn all the tips, tricks, shortcuts, functions and formulas you need to be an Excel power user. This course is designed specifically for Excel spreadsheet users who are already performing professional financial analysis and financial modeling, or are looking to prep for a corporate finance career.

This free spreadsheet training course starts with the Excel basics and quickly progresses to a more advanced level where even experts will learn something new. We think it's important to start at the bottom and build a solid base, which is why we review all the foundational skills you need before building more advanced spreadsheets. You'll learn to ditch the mouse and use only keyboard shortcuts to dramatically improve your spreadsheet building skills.

In the second half of the course you'll notice the functions and formulas getting more sophisticated and the quality of financial analysis and financial modeling becoming much higher. This half of the class focuses on finance-specific formulas that you'd use as an analyst performing financial analysis on the job.

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## KEY LEARNING OBJECTIVES

1. Learn everything you need to know about Excel spreadsheets for a career in corporate finance
2. Master keyboard shortcuts, functions, and formulas to save time speed up your modeling skills
3. Follow industry leading best practices; simulates on-the-job analyst training
4. Stand out in an interview or move up the ladder at work by dramatically boosting your MS Excel skills and confidence

# Introduction to Corporate Finance

This introduction to corporate finance course will give an overview of all the key concepts you need for a high-powered career in investment banking, equity research, private equity, corporate development, financial planning & analysis (FP&A), treasury, and much more.

The course covers a wide range of topics ranging from mergers and acquisitions to various types of capital raising. The program provides a qualitative overview of each topic, designed to give students an introduction to basic concepts, which they can explore further in our later courses.

## KEY LEARNING OBJECTIVES

1. Who are the key players in the capital markets?
2. What do the capital raising process looks like?
3. The main business valuation techniques
4. Types of valuation multiples
5. How to structure a deal
6. How to finance an acquisition
7. Types of debt securities
8. Types of equity securities
9. Overview of career paths
10. How to prepare for interviews

# Math for Corporate Finance

This four-module course demonstrates how a number of mathematical formulas can be used to conduct detailed analysis on a set of data and/or variables.

## MODULE 1 - DISCOUNTED CASH FLOWS

1. Understand the concept of the time value of money
2. Explain terms such as present value, future value, NPV, DCF, annuities, and perpetuities
3. Use DCF techniques to calculate present values
4. Calculate the present value of cash flow streams such as annuities and perpetuities

## MODULE 2 - BOND PRICING AND YIELDS

1. Use DCF to find the price of an annual or semi-annual bond
2. Calculate the different yields used to assess bond returns
3. Understand the relationship between bond prices and yields
4. Identify whether a bond is trading at par, premium, or discount

## MODULE 3 - KEY STATISTICAL SKILLS

1. Learn to calculate different measures of central tendency including arithmetic mean, weighted mean, WACC, and expected values
2. Calculate simple moving and weighted moving averages
3. Calculate different types of statistical dispersions such as range, variance, and standard deviation

## MODULE 4 - COVARIANCE, CORRELATION & REGRESSION

1. Use correlation and covariance to describe the relationship between two variables
2. Calculate covariance and correlation using Excel
3. Use regression analysis to describe the relationship between two variables
4. Undertake regression analysis in Excel and interpret the results

# Financial Modeling Fundamentals

This four-part series provides tips and tricks for Excel model builders, gives advice on how to audit your financial models, demonstrates how to use better formulas, and shows you how to monitor and handle uncertainty using scenario planning.

## MODULE 1 - EXCEL TIPS AND TRICKS

1. Learn how to speed up your Excel modeling skills by using keystroke navigation
2. Significantly improve how you can edit your worksheet by learning how to use editing shortcuts in Excel
3. Develop the skill every model builder needs in editing and modeling your spreadsheet in mere minutes

## MODULE 2 - BETTER FORMULAS

1. Build flexibility into financial forecasts
2. Break down complex calculations
3. Minimize errors in Excel models
4. Understand Excel function syntax performance

## MODULE 3 - CATERING FOR UNCERTAINTY

1. Learn how to perform sensitivity analysis
2. Understand how data tables and goal seek can facilitate your model building process
3. Learn how to measure the impact of future uncertainty on cash flows and profit with scenario planning
4. Learn how to use scenario and solver tools to see how certain inputs can impact your model

## MODULE 4 - AUDITING A MODEL

1. Learn how to quickly and easily find errors and audit a spreadsheet
2. Understand how the auditing tool-bar can help make your spreadsheet error-free
3. Learn how to use test data to uncover errors

# Financial Analysis Fundamentals

This four-module course demonstrates how you can perform a financial analysis on any organization using a wide variety of ratios derived from its financial statements.

## MODULE 1 - ANALYZING THE INCOME STATEMENT

1. Review the various components of the income statement
2. Conduct a comprehensive vertical and horizontal analysis of the income statement
3. Benchmark income statement performance against an appropriate peer group

## MODULE 2 - ANALYZING THE BALANCE SHEET

1. Breakdown and define each component of the balance sheet
2. Explain overall efficiency ratios: Total asset turnover and net asset turnover ratio
3. Explain working capital efficiency ratios: Inventory, accounts receivable, and accounts payable
4. Determine how to reduce the working capital funding gap to improve operational efficiencies
5. Undertake trend analysis to determine the overall financial performance of a company and forecast future performance

## MODULE 3 - FUNDING THE BUSINESS

1. Breakdown and understand each component of the cash flow statement
2. Understand different types of debt financing tools (e.g. bonds, syndicated loans, and leasing), equity (e.g. common shares and preferred shares), and leverage ratios (e.g. debt to tangible net worth, and total assets to equity)
3. Use real-life cash flow statements to assess the operations of a company

## MODULE 4 - PYRAMID OF RATIOS

1. Unlock the drivers of the return on equity ratio
2. Analyze the profitability, efficiency, and leverage ratios that make up the pyramid of ratios
3. Understand the links between the pyramid's primary, secondary, and tertiary ratios
4. Construct a pyramid of ratios using a set of published financial statements and perform a complete financial analysis

# Building a Financial Model in Excel



This four-part series guides you through how to apply a structured approach to financial modeling in Excel. It covers the many hallmarks that make financial models robust; demonstrates best practice techniques in planning model structure; and explains how to forecast the income statement from operating revenues down to operating profit.

## **MODULE 1 - A STRUCTURED APPROACH TO FINANCIAL MODELING**

1. Learn how to apply a structured approach to financial modeling in Excel
2. Understand the many hallmarks that make financial models robust
3. Use best practice techniques in planning your model structure
4. Learn how to forecast the income statement from operating revenues down to operating profit

## **MODULE 2 - FORECASTING INCOME STATEMENT AND BALANCE SHEET ITEMS**

1. Use different approaches to properly forecast operating assets
2. Learn how to forecast property, plant, equipment, and other operating assets
3. Learn how to forecast various components of working capital including accounts receivable, inventories, and accounts payable

## **MODULE 3 - DEBT AND FINANCING SCHEDULES**

1. Learn how to forecast debt financing and related interest costs
2. Learn how to forecast equity financing and dividends
3. Use Excel to solve circular references using both iterative and analytic approaches

## **MODULE 4 - BUILDING A FREE CASH FLOW FORECAST**

1. Understand the importance of incorporating error checks in your financial models
2. Learn how to derive a forecast cash flow statement based on a forecast income statement and balance sheet
3. Derive a free cash flow statement that can be used for equity valuation

# Business Valuation



This four-part course provides participants with the skills needed to do a basic business valuation.

## **MODULE 1 - VALUATION USING EQUITY MULTIPLES**

1. Calculate and analyze valuation using equity multiples
2. Appreciate the drivers of equity multiples
3. Value a company using equity multiples from comparable public companies and precedent transactions

## **MODULE 2 - VALUATION USING ENTERPRISE VALUE MULTIPLES**

1. Calculate various enterprise value multiples
2. Understand the drivers of enterprise value multiples
3. Value a business using enterprise value multiples

## **MODULE 3 - VALUING A BUSINESS USING DISCOUNTED CASH FLOWS**

1. Value a business using a two stage DCF valuation model
2. Calculate free cash flows to the firm and to equity
3. Outline the main drivers of free cash flows
4. Identify what DCF discount rate to use

## **MODULE 4 - DETERMINING THE COST OF CAPITAL**

1. Calculate the cost of equity funding
2. Calculate the cost of debt funding
3. Calculate an organization's weighted average cost of capital (WACC)

# Budgeting and Forecasting

Build and develop budgets, forecast results, and use variance analysis to track performance. This interactive and applied course enables participants to:

1. Adopt a disciplined approach to developing budgets
2. Forecast results with quantitative and qualitative methods
3. Effectively use variance analysis to track performance
4. Present results with charts and graphs

## Who should take this course?

Those who are responsible for financial management, budgeting, and forecasting within their organizations.

### KEY LEARNING OBJECTIVES

1. Understand the principles behind best practice financial management
2. Explain the importance of budgeting within a strategic framework
3. Build a robust budgeting process within their organization
4. Know when and where to use various budgeting approaches such as zero-based budgeting
5. Forecast future performance by better analyzing revenue and cost drivers
6. Use effective variance reporting to track organizational performance
7. Make use of Excel functions and tools that are particularly suited to the budgeting process.

### COURSE CONTENT

1. Budgeting within a strategic framework
2. Building a robust budgeting process
3. Managing budget psychology
4. A practical guide to developing budgets
5. Common budgeting approaches (e.g. Incremental, value based, zero based, etc.)
6. Forecasting techniques (moving average, regression analysis, etc.)
7. Tracking budget performance with variance analysis (waterfall charts, etc.)
8. Applied budgeting tools and techniques (Excel, solver, pivot tables, etc.)

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# Rolling 12-month Cash Flow Forecast



Master the art of building a rolling 12-month cash flow forecast model in our Financial Planning & Analysis (FP&A) course. In this course you will learn to build a cash flow model from scratch complete with assumptions, financials, supporting schedules and charts.

We will look at how to forecast revenues, operating expenses and changes in balance sheet items to arrive at monthly cash flow. From there we will assess the financial impact on the business, decide if capital needs to be raised, evaluate credit metrics, and create elegant charts to inform management.

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## KEY LEARNING OBJECTIVES

1. Apply a structured approach to monthly cash flow modeling in Excel
2. Build up the assumptions and formulas required to forecast the business
3. Understand how to forecast the financial statements based on the business plan
4. Calculate the monthly cash flow
5. Analyze the impact of the forecast on the company's balance sheet and capitalization
6. Output relevant graphs to illustrate the cash flow profile to management

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# Behavioral Finance Fundamentals



Behavioral finance is the study of the influence of psychology on the behavior of financial practitioners. In this three-part course, you will learn about the wide range of decision making biases and information processing errors that influence our financial decision making.

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## **MODULE 1 - DECISION MAKING BIASES AND ERRORS**

1. Overview of decision making biases and errors
2. Reflective versus reflexive decision making
3. The impact of overconfidence and optimism on decision making

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## **MODULE 2 - INFORMATION PROCESSING ERRORS**

1. Self-attribution and hindsight biases
2. Confirmation and representative biases
3. Guarding against the narrative fallacy

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## **MODULE 3 - HOW DECISIONS ARE IMPACTED BY OTHERS**

1. Anchoring bias
2. Loss aversion
3. Herding versus independent thinking

# Sensitivity Analysis for Financial Modeling



This single module advanced financial modeling course takes a deep dive into sensitivity analysis. By the end of this course you will have a through grasp of how to build a robust sensitivity analysis system into your financial model.

Form and function are both critical to ensure you can handle quick changes and information requests when you're working on a live transaction.

## KEY LEARNING OBJECTIVES

1. The importance of sensitivity analysis
2. Model integration - Direct and Indirect methods
3. Analyzing results
4. Preparing a gravity sort table
5. Using tornado charts
6. Presenting results

# Advanced Excel Formulas

Learn the most advanced formulas, functions and types of financial analysis to be an Excel power user. This course builds on our free Excel Crash Course and is designed specifically for spreadsheet users who are already proficient and looking to take their skills to an advanced level.

This advanced tutorial will help you become a world class financial analyst for careers in investment banking, private equity, corporate development, equity research and FP&A.

## Content and overview:

This advanced Excel training course starts with a blank spreadsheet and quickly dives into using combinations of functions and formulas to perform dynamic analysis.

### THE MAIN FORMULAS AND FUNCTIONS COVERED IN THIS COURSE

1. INDEX and MATCH
2. IF with AND / OR
3. OFFSET combined with other functions
4. CHOOSE for creating scenarios
5. INDIRECT combined with other functions
6. XNPV and XIRR
7. CELL, COUNTA and MID functions combined together
8. PMT, IPMT and principal payment calculations

### THE MAIN TYPES OF DATA ANALYSIS IN THIS TUTORIAL INCLUDE

1. Data tables
2. Pivot tables
3. Column and line charts
4. Stacked column charts
5. Waterfall charts
6. Gauge charts

# Excel Dashboards & Data Visualization

This in-depth course will teach you how to build a custom Excel dashboard using professional data visualization techniques. By the end of the course you will have a solid understanding of how to tell a story by combining data, charts, graphs, and other visuals.

## Who should take this course?

This Excel dashboards course should be taken by any type of financial analyst working in corporate finance. This includes financial planning & analysis (FP&A), corporate development, equity research, and investment banking.

### KEY LEARNING OBJECTIVES

This course will teach you all about the most important data visualization techniques, including:

1. How to focus attention
2. How to use white space effectively
3. Storytelling with data
4. Narrative techniques
5. A variety of visuals
6. How to use affordances
7. Storyboarding

Additionally, this online course will teach you how to create a dashboard in Excel from scratch. The main dashboard topics covered in this class include:

1. Page layout and design
2. Line charts
3. Area charts
4. Column and bar charts
5. Gauge charts
6. Formatting and design

# Real Estate Financial Modeling

Build a dynamic Real Estate Financial Model to evaluate the investment return profile of a development project in Excel.

This financial modeling real estate excel course is designed for development professionals, lending / banking analysts, surveyors, and anyone interested in mastering the art of building a real estate development models from scratch.

In this real estate modeling course, you will learn step-by-step how to build a dynamic a financial model that incorporates sensitivity analysis of development costs, sales prices, and other aspects of development.

## Who should take this course:

This real estate development financial modeling in Excel course is designed for anyone who is seeking to develop intermediate to advanced financial modeling skills and become an expert financial modeling for real estate development.

### KEY LEARNING OBJECTIVES

1. Real estate industry Overview
2. Calculate Cap Rate and Net Operating Income (NOI)
3. Build an interactive financial model to assess a project's financial viability
4. Understand how to project real estate financing (both debt and equity) flow in and out depending on stage of development
5. Design and structure of an Excel-based project finance model
6. Modeling cash flows for a real estate development project
7. Build in "triggers" and sensitivities to understand a project's exposure to key drivers
8. Build in ownership and financial structures (debt & equity)
9. Calculate Internal Rate of Return (IRR), Return on Sales, Return on Cost
10. Produce a one-page investment summary memo

# eCommerce Financial Model & Valuation



In this course, you will master the art of building a financial model and valuing an eCommerce Startup. In this course you will learn to build a startup financial model from scratch complete with assumptions, financials, valuation, and output charts. We will look at how much money this business has to raise based on its business plan and model out each year of cash flow.

## KEY LEARNING OBJECTIVES

1. Understand key Startup / eCommerce terms and definitions
2. Understand the eCommerce industry
3. Input key assumptions into a financial model
4. Calculate an order buildup and customer base schedule
5. Build financial statements based on the business plan
6. Perform a DCF valuation of the startup / eCommerce business
7. Output relevant graphs to illustrate the investment opportunity

# Mining Financial Model & Valuation

In this course, you will master the art of building a financial model for a mining asset, complete with assumptions, financials, valuation, sensitivity analysis, and output charts. In this course we work through a case study of a real mining asset by pulling information from the Feasibility Study, inputting it into Excel, building a forecast, and valuing the asset.

## KEY LEARNING OBJECTIVES

1. Understand key mining terms and definitions
2. Understand the mining life cycle from start to finish
3. Read and extract the important information from a mining technical report (feasibility study)
4. Input key assumptions into a financial model
5. Calculate production statistics based on a mine plan
6. Build financial statements based on a mine plan
7. Perform a DCF valuation of a mining asset
8. Build sensitivity analysis to test for different input assumptions
9. Output relevant graphs to illustrate the investment opportunity

# Financial Modeling using VBA

This four-part course provides participants with the skills needed to incorporate Visual Basic for Applications (VBA) into financial models. This VBA module series will be particularly valuable to those who regularly build financial models in Excel and are looking for a thorough introduction to VBA.

## MODULE 1 - INTRODUCTION TO VBA FOR FINANCIAL MODELING IN EXCEL

1. Explain the benefits of VBA in financial models
2. Navigate around the VBE window
3. Record macros using absolute and relative referencing

## MODULE 2 - DESIGN, BUILD AND RUN VBA SUB PROCEDURES

1. Write VBA code for a sub procedure
2. Differentiate between VBA objects, properties and methods
3. Understand why and how to declare variables
4. Call sub procedures when needed

## MODULE 3 - CREATE CUSTOMIZED EXCEL FUNCTIONS

1. Utilize unique VBA functions
2. Incorporate Excel functions into VBA code
3. Create customized functions using VBA code

## MODULE 4 - BRANCHING, LOOPING AND PROCEDURE CODE

1. Create event handling procedures
2. Use "On Error" statements
3. Create branching code using "If...Then" statements
4. Create looping code using "For...Next" and "Do...Loop" statements

# Mergers & Acquisitions (M&A)

This advanced financial modeling course on mergers and acquisitions is designed for professionals working in investment banking, corporate development, private equity, and other areas of corporate finance that deal with analyzing M&A transactions.

## M&A MODELING COURSE OBJECTIVES

1. Learn how to structure an M&A model in the most efficient way
2. Set up all the assumptions and drivers required to build out the M&A model
3. Calculate all the necessary adjusting entries required to create a post-transaction balance sheet
4. Integrate the acquirer and the target into a pro form model
5. Calculate the accretion or dilution of key per share metrics post-transaction
6. Perform sensitivity analysis on key assumptions and assess the overall impact of the transaction

## MERGERS AND ACQUISITIONS COURSE CASE STUDY

This course is built on a case study of Online Company Inc acquiring Brick 'n' Mortar Co. Through the course of the transaction, students will learn about:

1. The construction of a detailed Pro Forma model
2. Analysis of synergies, revenue enhancements, cost structures
3. Integration considerations
4. Accretion / dilution analysis
5. Deal terms and structuring
6. The strategic impact of combining the businesses
7. Share price impact

## WHAT'S INCLUDED IN THE M&A COURSE?

This mergers and acquisitions course includes all of the following:

1. Blank M&A model template (Excel)
2. Completed M&A model template (Excel)
3. 4+ hours of detailed video instruction
4. Certificate of completion

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# Body of Knowledge

The CFI Body of Knowledge represents the main topics, skills, and abilities required to successfully complete the program. The CFI Program is designed to instill the practical skills required to perform world-class financial analysis.

## **I. Accounting**

- Constructing a balance sheet and income statement
- Constructing a cash flow statement
- Understanding the balance sheet
- Understanding the income statement and cash flow

## **II. Budgeting, Forecasting, FP&A**

- Budgeting Within a Strategic Framework
- Building a Robust Budgeting Process
- A Practical Guide to Developing Budgets
- Forecasting Techniques
- Tracking Budget Performance with Variance Analysis
- Applied Budgeting Tools and Techniques in Excel
- Financial Modeling Best Practices
- Modeling Cash Flows
- Building Your Financial Model in Excel
- Enhancing Your Model

## **III. Excel**

- Excel layout
- Excel settings
- Basic financial analysis setup
- Advanced financial analysis setup
- Functions and formulas

- Excel tips and tricks
- Better formulas
- Catering for uncertainty
- Auditing a model
- Excel template setup
- Financial statements
- Financial analysis
- Macros
- Introduction to VBA for financial modeling in Excel
- Design, build and run VBA sub procedures
- Create customized Excel functions
- Branching, looping and procedure code

#### **IV. Finance**

- Fixed income products and markets
- Pricing fixed income securities and duration
- Overview of Corporate Finance
- Business valuation
- Mergers & Acquisitions
- Debt financing
- Equity financing
- Corporate finance careers
- Decision making biases and errors
- Information processing errors
- How decisions are impacted by others

#### **V. Financial Analysis**

- Vertical and horizontal income statement analysis
- Balance sheet and leverage ratios
- Cash flow statements and ratios
- Rates of return and profitability analysis

## **VI. Financial Modeling**

- A structured approach to financial modeling
- Forecasting income statement and balance sheet items
- Debt and financing schedules
- Building a free cash flow forecast
- Scenario analysis
- Sensitivity analysis
- Cap Rates and Net Operating Income (NOI)
- Land Loans and Construction Loans
- Real Estate Development Financial Model
- Joint Ventures & Cash Flow Waterfalls
- eCommerce Financial Model
- Customer Metrics
- DCF Valuation Modeling
- Introduction to the Mining Industry
- Valuation Metrics
- Mining Financial Model
- M&A Model Structure
- Acquirer & Target Models
- Transaction Assumptions
- Closing Balance Sheet
- Pro Forma Financial Model
- Accretion & Dilution

## **VII. Math**

- Discounted Cash Flow (DCF)
- Bond pricing and yields
- Key statistical skills
- Covariance, correlation and regression

## **VIII. Presentation**

- Data Visualization Overview
- Visuals
- Focus attention
- Storytelling
- Dashboards
- Charts, Tables and Graphs

## **IX. Valuation**

- Introduction
- Equity Value vs. Enterprise Value
- Valuation Multiples
- Comparable Company Analysis (Comps)
- Precedent M&A Transactions (Precedents)
- Discounted Cash Flow (DCF) Analysis
- Weighted Average Cost of Capital (WACC)
- Presentation of Results

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