



Corporate Finance Institute®

Financial Modeling & Valuation Analyst (FMVA)™  
Certification Program

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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.

	100 hours
	25 financial analyst courses
	14+ financial model templates
	\$497 (\$2,900 save over 80%)
	100% online

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.

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.

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



#### Engaging

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 required courses** 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.



## Graduation Requirements

To be granted the **Financial Modeling & Valuation Analyst** 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
Excel Modeling Fundamentals	CFI 107	1-3
Financial Models & Templates Library	CFI 099	N/A

## Required Courses (9 required)



Course Name	Course Code	Recommended Study Hours
Financial Analysis Fundamentals	CFI 201	2-4
Building a Financial Model in Excel	CFI 211	2-4
Business Valuation Modeling	CFI 212	2-4
Budgeting and Forecasting	CFI 221	2-4
FP&A Monthly Cash Flow Forecasting	CFI 222	2-4
Scenario and Sensitivity Analysis	CFI 231	2-4
Advanced Excel Formulas	CFI 232	2-4
Dashboards & Data Visualization	CFI 241	2-5
PowerPoint & Pitchbooks	CFI 242	2-5



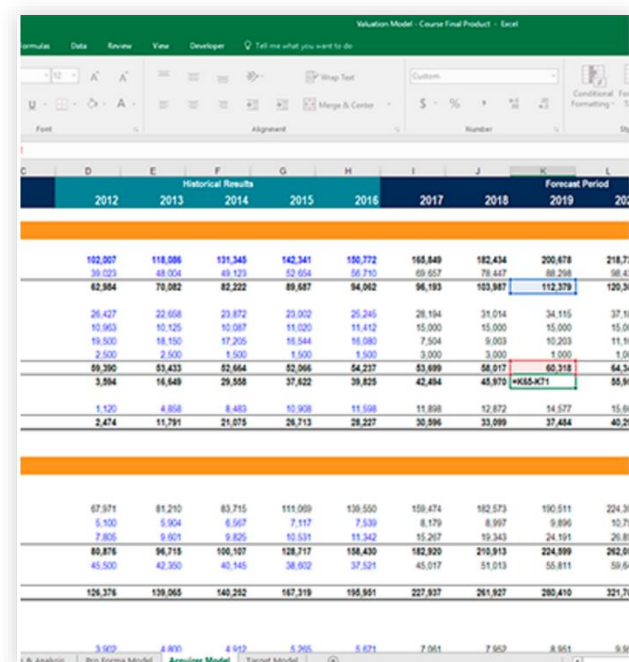
## Elective Courses (3 required)



Course	Course Code	Recommended Study Hours
Behavioral Finance Fundamentals	CFI 301	2-4
Real Estate Financial Modeling	CFI 311	4-8
Startup / e-Commerce Financial Model	CFI 312	4-8
Mining Financial Model & Valuation	CFI 313	4-8
Mergers and Acquisitions (M&A) Modeling	CFI 314	4-8
Leveraged Buyout (LBO) Modeling	CFI 315	4-8
Financial Modeling with VBA	CFI 331	2-5
Corporate & Business Strategy	CFI 350	3-6

# 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:

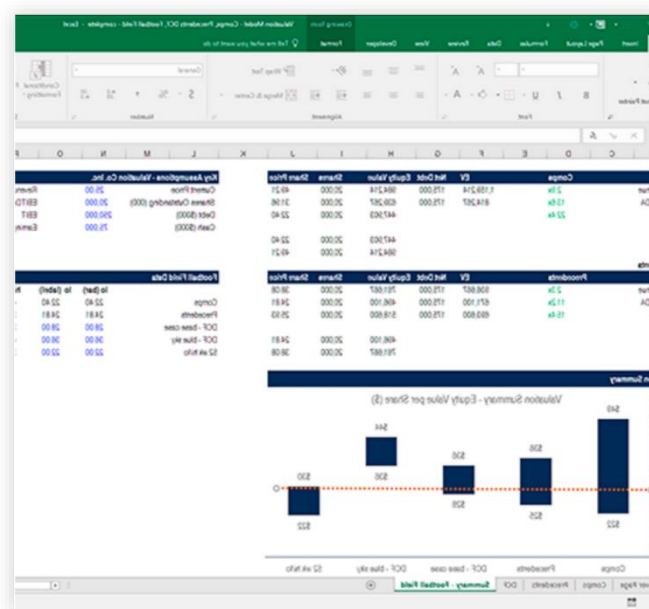


## Financial Modeling

- ✓ 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

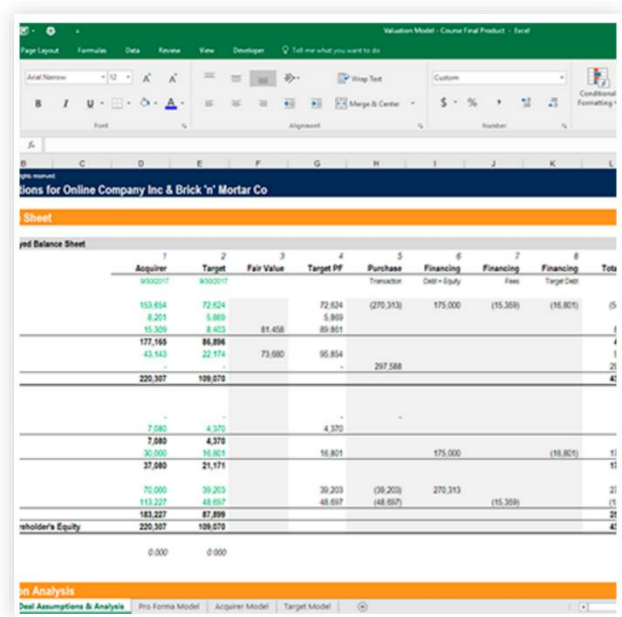
## Valuation

- ✓ 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

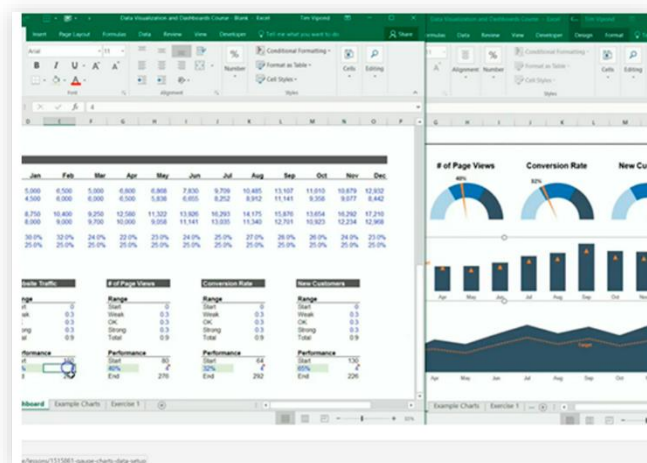
- ✓ Learn advanced forms of financial analysis including ratios, rates of return, risk assessment, credit metrics, debt schedules, cash flow waterfalls and more
- ✓ Assess the overall attractiveness of investment opportunities using financial models, scenarios, and multiple types of analysis
- ✓ Develop insightful 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



Acquirer	Target	Fair Value	Target PF	Purchase Transaction	Financing Debt + Equity	Financing Fees	Financing Target Debt	Totals
9500000	9500000							
153,654	72,424		72,424	(270,313)	175,000	(15,359)	(16,861)	(5)
8,201	5,969		5,969					4
15,309	8,453		8,453					4
172,165	86,896							21
43,143	22,574	73,080	96,854					21
				297,588				42
220,367	109,070							
7,080	4,370		4,370					
7,080	4,370				175,000		(16,861)	11
30,000	16,861		16,861					11
37,080	21,171							
70,000	36,263		36,263	(19,203)	270,313	(15,359)		21
110,227	48,897		48,897					11
183,227	87,899							21
220,367	109,070							42
0.000	0.000							

## 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:



Emergence with superior confidence and business skills.



Have better career opportunities available to you.



Be more desirable in the eyes of hiring managers and recruiters.

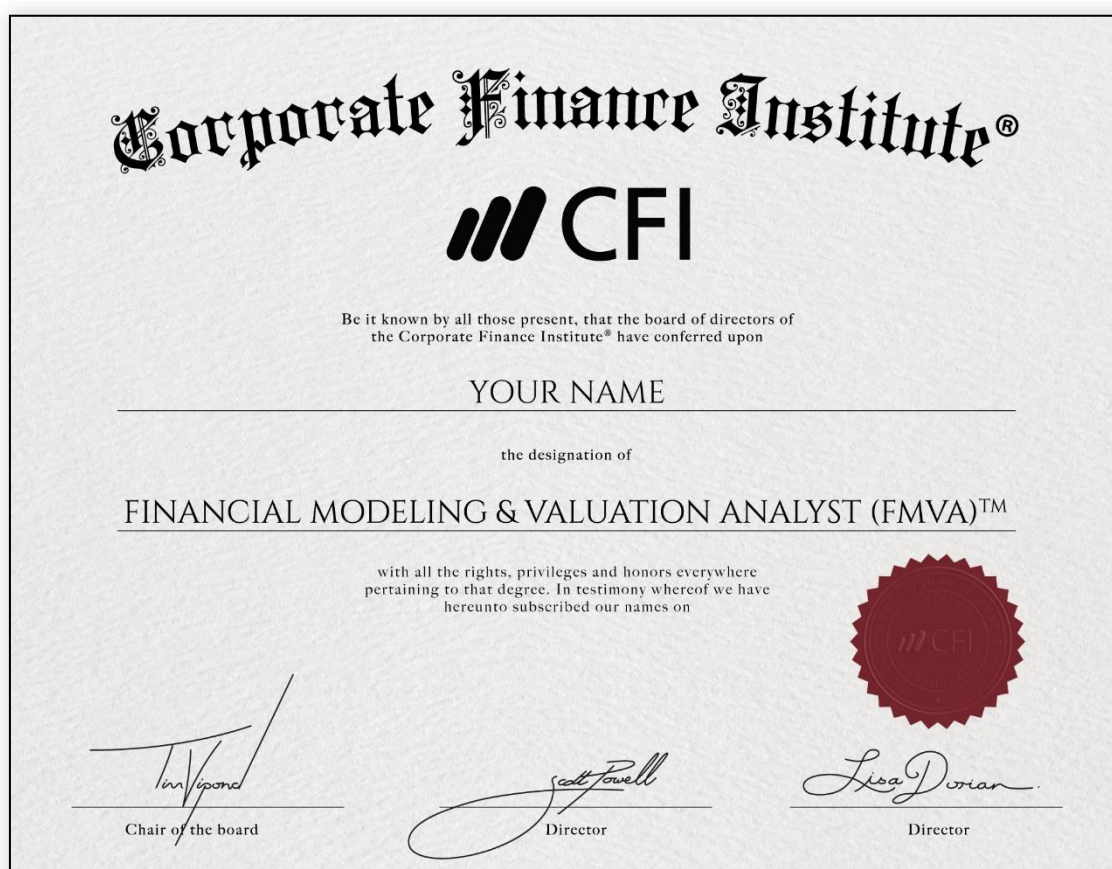
# Why Certification is Necessary

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

Financial Modeling & Valuation Analyst (FMVA) certification program – \$497

Students can enroll in the full CFI Program or pick and choose individual courses.

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.

# 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.

## **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

## **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

# 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.

## **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.)

## **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

# 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 have learnt.

## **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

## **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



# 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.

## 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

# Excel 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 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 Modeling



This business valuation course provides participants with the skills needed to perform detailed business valuation modeling using three main methods: Comps, Precedents and DCF Analysis.

The valuation training provided in this series will be particularly valuable to those who are looking for a detailed and step-by-step explanation of how to value a company based on comparable companies, past M&A transactions and a Discounted Cash Flow Model (DCF).

## KEY LEARNING OBJECTIVES

1. Understand the difference between equity value and enterprise value
2. Learn how to calculate various equity and enterprise value multiples
3. Understand the drivers of equity multiples and value a business using equity multiples
4. Calculate and analyze valuation multiples
5. Learn the most common multiples: EV/Revenue, EV/EBITDA, EV/EBIT, P/E
6. Know when each type of multiple is appropriate to use
7. Appreciate the drivers of equity and enterprise multiples
8. Value a company using comparable company analysis
9. Value a company using precedent M&A transactions
10. Learn how to value a business using discounted cash flow techniques.
11. Complete Excel-based case studies and solutions as well as a PDF valuation reference guide that can be used while taking the course and downloaded to your computer for future reference.
12. Calculate free cash flows to the firm and to equity
13. Outline the main drivers of free cash flows
14. Value a business using a two-stage DCF valuation model
15. Learn how to calculate the cost of equity, cost of debt and the weighted average cost of capital.
16. Calculate Beta in an Excel spreadsheet
17. Calculate an organization's weighted average cost of capital (WACC)
18. Create a football field chart to summarize the various valuation methods used in the analysis: Comps, Precedents, DCF

## COURSE CONTENT

1. Equity Value vs. Enterprise Value
2. Valuation Multiples
3. Comparable Company Analysis (Comps)
4. Precedent M&A Transactions (Precedents)
5. Discounted Cash Flow (DCF) Model
6. Weighted Average Cost of Capital (WACC)
7. Presentation of Results

# 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.)



# FP&A Monthly Cash Flow Forecasting



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.

## 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

# 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

# PowerPoint & Pitchbooks



Learn the most advanced functions, tips and best practices for presentation design to be a distinguished PowerPoint user. This tutorial is designed specifically for financial analysts who need to create PowerPoint presentations, mainly in the form of pitchbooks. This is a classic skillset for Analysts who need to make world-class presentations.

This advanced PowerPoint tutorial will help you become a world-class financial analyst for careers in investment banking, private equity, corporate development, equity research and FP&A. By watching the instructor build the pitchbook right on your screen, you can easily pause, rewatch, and repeat exercises until you've mastered them.

## Content and overview:

This Investment Banking PowerPoint crash course starts with a classic example of a "bad" presentation and quickly dives into using PowerPoint functions to improve the presentation to systematically make it "good". This course focuses on two types of presentations: distributed presentations where the presentation is printed or distributed electronically, and live presentations where there is a speech accompanying the presentation.

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

1. Theme colors
2. Slide master
3. Gridlines and guides
4. Formatting text boxes
5. Formatting shapes and lines
6. Inserting tables and charts from Excel
7. Alignment
8. Creating a timeline

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

1. Inserting a background picture
2. Inserting a color filter
3. Crop images to shapes
4. Icons and transparent logos
5. Slide transitions
6. Animation

# 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.

## **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

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

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

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

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

# 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 one part module, 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 one part module, 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

# 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

# Leveraged Buyout Modeling



This advanced course covers how to set up and build an LBO model step-by-step including assumptions, financing, forecast income statement, balance sheet, cash flow, debt schedule, DCF, IRR, sensitivity analysis, error checks, all formulas, functions and formatting.

## Who Should Take this LBO Model Course?

This LBO model course is designed for advanced financial practitioners. It is most suitable for professionals working in investment banking and private equity, although it may also be useful for professionals in equity research, corporate development, and other areas of finance.

### LBO MODELING COURSE OBJECTIVES

1. Learn how to effectively set up the model in Excel
2. Set up assumptions on general transaction details, operating scenarios, financing terms, sources and uses of cash
3. Construct the three historical financial statements using raw data
4. Build the forecast using operating scenarios and other assumptions
5. Build the pro forma balance sheet by calculating all adjusting entries including goodwill and recapitalization
6. Create a debt schedule by modeling all tranches of debt and interest using dynamic formulas
7. Model all necessary debt covenants such as debt/EBITDA, EBIT/Interest, fixed-charge coverage ratio
8. Incorporate a discounted cash flow (DCF) analysis and internal rate of return (IRR) by investor type
9. Perform sensitivity analysis on the IRR based on changes in key assumptions and drivers
10. Create charts & graphs to show outputs and results from the LBO model

### WHAT'S INCLUDED IN THE LBO COURSE?

This LBO course includes all of the following:

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

# 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**

11. Explain the benefits of VBA in financial models
12. Navigate around the VBE window
13. 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

# Corporate & Business Strategy



This Corporate & Business Strategy course covers the most important terminologies, theories, concepts, and frameworks on strategy. The course is designed to guide you through a comprehensive strategic analysis process, and demonstrate the application of theories into real-world business situations.

## Who Should Take This Corporate & Business Strategy Course?

CFI's Corporate & Business Strategy course is beyond just academic definitions, theories and concepts — you will take raw data and information provided in the case study, perform analyses as guided through the video lectures, and build strategic alternatives based on the result of your analyses. At the end of the day, you will be able to create a detailed strategy document, describing the entire strategic analysis process from external analysis to the recommendation of strategic alternatives, which can then be presented to the management board of the company.

### CORPORATE & BUSINESS STRATEGY COURSE OBJECTIVES

1. Understand how the strategic analysis process helps decision makers perform in-depth analyses and identify optimal strategic alternatives
2. Differentiate between the three levels of strategy (corporate, business, and functional)
3. Perform external analysis by looking at the supply chain, mapping out strategic groups, building competitive forces model and analyzing PEST factors
4. Perform internal analysis by understanding a company's core competencies, competitive advantage, value chain activities and ways to sustain competitive advantages
5. Assess a company's current corporate-level, business-level and functional-level strategies
6. Learn how to generate, evaluate and select optimal strategic alternatives through methods such as SWOT analysis, DCF analysis and multi-criteria analysis
7. Tie strategic alternatives to a company's mission, vision and goals
8. Apply all theories taught in the lectures into a case study and generate the appropriate strategies using the provided information

### WHAT'S INCLUDED IN THE STRATEGY COURSE?

1. Blank strategic analysis template (PPT)
2. Completed case study with all important tables and matrices, and DCF model (Excel)
3. 3+ 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

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## **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



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## **VIII. Presentation**

- Data Visualization
- Excel Visuals
- Focus attention
- Storytelling
- Excel Dashboards
- PowerPoint Layout
- Design Principles
- PowerPoint Setup & Functions
- Slide Master
- Formatting Tips
- Transitions
- Animations

## **IX. Valuation**

- 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

For more information or to register for  
our courses please contact us at:

[learning@corporatefinanceinstitute.com](mailto:learning@corporatefinanceinstitute.com)  
[www.corporatefinanceinstitute.com](http://www.corporatefinanceinstitute.com)