



FINANCIAL MODELING COURSE CURRICULUM

BASIC AND ADVANCED EXCEL

- Introduction to MS Excel and understanding the Ribbon
- Keyboard shortcuts and its importance
- Regular use functions like Vlookup, Hlookup, Index, Match, Sumifs, Offset, Paste Special, Concatenate, Indirect among others and their combination among themselves
- Rules of Conditional Formatting
- Font and number formatting
- Data presentation through Pivot Tables, Pivot Charts and Slicers
- Introduction to Macros
- Creating different types charts and graphs including but not limited to bar graphs, line charts, combo charts, football field, scatter plot, histogram, pie chart, waterfall, stacked column chart
- Sparklines
- Sensitivity analysis using Data Tables
- Time value functions like PMT, PV, FV, NPER, RATE
- Text functions like Proper, Find, Replace, Substitute, Left, Right, Mid, etc
- Text to Column functions like Delimit, Flash Fill
- Return functions like IRR, XIRR, NPV, XNPV
- Iterative calculations and circular referencing
- What If Analysis using Goal Seek, Scenario Manager, Data Table
- Concepts of freezing of cells, rows and columns
- Data Validation, Sorting and Filters using excel functions as well as formulas
- Table functions and dynamic arrays

ACCOUNTING CONCEPTS AND FINANCIAL STATEMENTS

- Key accounting fundamental concepts including Accrual vs Cash reporting, Double Entry Book Keeping, Law of Going Concern, Law of Prudence, Matching Principle, Money Measurement, Historical Cost Concept, Accounting Period Concept, Full Disclosure Concept, Business Entity Concept
- Understanding Income Statement, Balance Sheet and Cash Flow Statement and their salient features
- Concepts of key line items Revenue, Direct Costs, Operating Costs, EBITDA, Depreciation & Amortization, Impairment of Goodwill, Depletion, Cash flows from different activities, Current Assets, Current Liabilities, Non-Current Assets, Non-Current Liabilities, Shareholders' Equity, Minority Interest, Other Equity, Capital Expenditures, Deferred Revenue
- Concept of Comprehensive Income
- Reading of Annual Report and Understanding of Management Discussion & Analysis (MD&A) section
- Relevance of Notes to Accounts
- Understanding the interlinkages and relationship among the three financial statements
- Preparation of Common size financial statements

RATIO/KPI ANALYSIS

- Different Types of Ratios – Activity/Turnover, Liquidity, Solvency, Profitability, Valuation, etc.
- Activity Ratios including Receivables Turnover, Days of Sales Outstanding, Inventory Turnover, Days of Inventory on Hand, Payables Turnover, Number of Days Payables, Total Asset Turnover, Fixed Asset Turnover, Working Capital Turnover
- Liquidity Ratios including Current Ratio, Quick Ratio, Cash Ratio, Defensive Interval, Cash Conversion Cycle
- Solvency Ratios including Debt to Equity, Debt to Capital, Debt to Assets, Financial Leverage, Interest Coverage, Debt to EBITDA, Fixed Charge Coverage
- Profitability Ratios including Net Profit Margin, Gross Margin, EBIT/Operating Profit Margin, Pre-tax Margin, Return on Assets, Operating Return on Assets, Return on Total Capital, Return on Invested Capital, Return on Equity, Return on Common Equity
- DuPont formula – three-stage as well as five-stage analysis
- Valuation Ratios including Price to Earnings, Price to Cashflow, Price to Sales, Price to Book Value, EV/EBITDA, EV/Sales
- Basic EPS, Diluted EPS (Dilutive as well as Anti-dilutive Securities), Treasury Stock Method
- Preparation of financial summary
- Benchmarking the subject company's performance and position in contrast to its peers and industry

TECHNICALS OF FINANCIAL MODELING

- Introduction to the structure for a financial Model
- Creating scenarios using different ways including Index, Choose, Scenario Manager
- Projecting/forecasting the three financial statements – IS, BS and CFS
- Building detailed revenue and cost drivers for different business types including real estate, e-commerce, utility, business services, automobiles, food aggregator, subscription-based firms, conglomerate/MNC businesses, etc.
- Preparation of different schedules including equity, depreciation, debt, working capital, fixed assets, etc.
- Best Financial Modeling practices and error tracking tricks
- Key formatting tips including best print setup approach
- Addition of Cover Page, Index, Financial Summary and other key tabs

DIFFERENT TYPES OF FINANCIAL MODELS

- Introduction to the structure for a financial Model

LBO Model:

- Concept of Leveraged Buyout Deal
- Assumptions for an LBO deal model
- Building Pro-Forma Financial Statements and required adjustments
- Debt and Goodwill calculation
- Preparing a Sources and Uses table
- Preparation of Cash Waterfall
- Exit Analysis and calculation of return metrics including IRR and MOIC

M&A Model:

- Basics of Merger and Acquisition Model
- Concepts of Accretion and Dilution
- Relevance of Synergies – Operating and Financing
- Performing Sensitivity Analysis on EPS

Private Equity Return Model:

- Preparation of Capital Structure
- Private Equity and Private Debt Assumptions including Floating Rate, Original Issue Discount (OID), PIK Rate, Amortization, Drawn and Undrawn Fees
- Concepts of Revolver, Roll-over Equity, Sponsor Capital and other tranches of capital
- Concepts of Committed Capital, Assets under Management (AUM), Dry Powder, Loan to Value (LTV)
- Preparation of Investment Cashflow and returns calculation

13 Week Cash Flow Model:

- Concepts of Financial Distress, Restructuring and Chapter 7 Liquidation
- Building of Operating cash receipts and payments, non-operating cash payments, and revolver facility plug-in
- Working Capital projections
- Cash to EBITDA Reconciliation

BUSINESS VALUATION

Relative Valuation– Trading and Transaction Comps:

- Difference between GPC and GTM
- Difference between Deal Value, Offer Value and Transaction Value
- Criteria to screen peers
- Valuation multiples to be used
- Calculation of Enterprise Value using Equity Value and other components
- Ideal time periods to focus on including Last Twelve Months (LTM), Next Twelve Months (NTM), historical years and projected years
- Concept of Controlling Premium

DCF Valuation:

- Understanding and calculation of FCFF vs FCFE and its relationship
- Related concepts of NOPAT, change in working capital, Capex adjustments
- WACC using detailed calculations for the cost of equity using CAPM, multi-factor model, dividend capitalisation model, and bond yield plus risk premium approach. Also, understanding the different approaches for calculating the cost of debt and cost of preferred stock
- Concepts of different risks and their inclusion for valuation purposes (ERP, CRP, SSRP, CSRP, DLOM, DLOC)
- Different ways of calculating Beta
- Concepts of Levered and Unlevered Beta
- Terminal Value using different approaches– Gordon Growth Model/Perpetuity Growth Model, Exit Multiple Method, H-Model
- Mid-Period valuations
- Sensitivity Tables

NAV Approach for Valuation:

- Relevance of the approach

Blended valuation presented through football field analysis

Presentation of Valuation Output

Preparation of Valuation Report

Concepts of Pre-Money and Post-Money Valuation