DETAILED COURSE SYLLABUS

Financial Modeling: Weekday Program

160 Hrs Live Training | Total 259 Training Hours

COURSE STRUCTURE AT A GLANCE

Part	Level	Certification	Hrs
Part I – Basic Tools: Excel	Beginner	FM Essential	18
Part II – Python for Finance	Intermediate	Python Certification	12
Part III – Microsoft Power BI	Intermediate	Microsoft Certified	12
Part IV – SQL	Intermediate	—	10
Part V – Finance Fundamentals	Beginner	Finance Fundamental	30
Part VI – Project Finance	Intermediate	Project Finance	16
Part VII – Equity Valuation & Research	Advanced	Financial Modeling	22
Part VIII – AI for Financial Modeling ★	Advanced	AI Lab Certificate	8
Part IX – AI Excel Automation & Dashboards ★	Advanced	AI Lab Certificate	8
Part X – AI Equity Research & Analysis ★	Advanced	AI Lab Certificate	8
Part XI – AI for IB Pitch Decks & Reports ★	Advanced	AI Lab Certificate	8
Electives – Min. 3 from 11 Model Projects	Advanced	Project Letter	98
Interview Preparation Technical	Advanced	—	30
Aptitude Test Interview Preparation	Beginner	—	8
Communication Training	Beginner	—	15

Assessment Structure

- 60% Projects, 40% Quiz
- Minimum Passing Score Required for Certification

PART I — BASIC TOOLS FOR FINANCE

Module	Type	Title	Sessions	Hrs
1	**Tools**	Excel Part 1	2	4
2	**Tools**	Excel Part 2	2	4
3	**Tools**	Financial Mathematics	3	6
4	**Tools**	Statistics for Finance	2	4
		Total Hours		18

Course Outcomes

- Use Excel for handling complex data with advanced functions and formulas
- Demonstrate financial mathematics knowledge to calculate investment, business, and project returns
- Understand risk in investments, its biases, and alternative options

Module 1: Excel Part 1

Introduction to spreadsheets, logic behind spreadsheets and underlying code, handling the working of spreadsheets, cell referencing and its application, cell freeze and its applications.

- ▶ *Case Study 1: Sensitivity Analysis using Manual Referencing*

Module 2: Excel Part 2

Introduction to lookup functions, VLOOKUP – use and problems, H-Lookup application, INDEX and MATCH functions, logical operators in Excel, SUMIF functions, Pivot Tables, Slicers, and Dashboard building.

- ▶ *Case Study 2: VLOOKUP Practice Case*
- ▶ *Case Study 3: Exchange Data Presentation using Lookup*
- ▶ *Case Study 4: Sales Data Dashboard*

Module 3: Financial Mathematics

Introduction to Time Value of Money and compounding concepts: Present Value, Future Value, Rate, NPER, IRR, XIRR, MIRR, NPV, and Discount Rate calculation.

- ▶ *Case Study 5: SIP Fund Selection Case*
- ▶ *Case Study 6: Portfolio Allocation – NIFTY, Crude, Gold*

Module 4: Statistics for Finance

Understanding statistical concepts as applied to finance, including measures of central tendency, dispersion, probability distributions, and their use in financial risk assessment.

PART II — PYTHON FOR FINANCE- Self Study Module

Module	Type	Title	Sessions	Hrs
1	**Core**	Python Data Types	1	2
2	**Core**	Python Operators	1	2
3	**Core**	Data Analysis Using NumPy & Pandas	2	4
4	**Core**	Data Visualization using Python	1	2
5	**Core**	Machine Learning Using Python	2	4
		Total Hours		12

Module 1: Python Data Types

Introduction to data types in Python including numbers, strings, lists, dictionaries, booleans, tuples, and sets. Print formatting and collection operations.

Module 2: Python Operators

Comparison operators, conditional statements (if/elif/else), for loops, while loops, and range() function for financial computation automation.

Module 3: Data Analysis Using Python (NumPy & Pandas)

NumPy arrays, array indexing, array operations. Pandas DataFrames, handling missing data, groupby, merging, joining, concatenating, and data I/O operations.

- ▶ *Case Studies: Salary Exercise, E-Commerce Case*

Module 4: Data Visualization Using Python

Introduction to Matplotlib for data visualization. Introduction to Seaborn for statistical graphics.

- ▶ *Case Studies: Data Capstone Projects – Finance Project*

Module 5: Machine Learning Using Python

Introduction to machine learning, overview of ML algorithms and use cases in finance, linear regression, logistic regression — with exercises and finance case studies.

PART III — MICROSOFT POWER BI- Self Study Module

Module	Type	Title	Sessions	Hrs
1	**Core**	Power BI Set Up	1	2
2	**Core**	EDA using Power BI	2	4
3	**Core**	Data Visualization with Reports	2	4
4	**Core**	Dashboard Building using Power BI	1	2
		Total Hours		12

Module 1: Power BI Set Up

Basic set-up requirements of Microsoft Power BI, overview of major functionalities and interface navigation.

Module 2: EDA Using Power BI

Exploratory Data Analysis using Power BI functionalities to understand data before performing further financial analysis.

Module 3: Data Visualization with Reports

Creating professional charts and data presentations using Power BI report views.

Module 4: Dashboards using Power BI

Building powerful interactive dashboards to summarize data analysis and present financial insights visually.

PART IV — SQL FOR FINANCE- Self Study Module

Module	Type	Title	Sessions	Hrs
1	**Core**	SQL Introduction	1	2
2	**Core**	SQL Operators	1	2
3	**Core**	Data Tables in SQL	1	2
4	**Core**	Major SQL Functions	1	2
5	**Core**	SQL Database	1	2
		Total Hours		10

PART V — FINANCE FUNDAMENTALS

Module	Type	Title	Sessions	Hrs
1	Core	Accounting Mechanics	1	2
2	Core	Financial Statements	1	2
3	Core	Ratio Analysis	3	6
4	Core	Taxation – DTL & DTA	1	2
		Total Hours		12

Course Outcomes

- Demonstrate understanding of how Financial Statements work
- Apply accounting and financial mathematics for decision making
- Deep dive into financial statements of real companies
- Use and interpret ratios for company financial analysis

Module 1: Accounting Mechanics

Use of financial statements, interlinkages of three statements, different methods of creating financial statements, and the concept of accrual accounting.

- ▶ *Case Study 9: Creating Financial Statements from Scratch in Excel*
- ▶ *Case Study 10: Creating Financial Statements from Scratch – Part 2*

Module 2: Income Statement, Balance Sheet & Cash Flow Statement

In-depth working knowledge of all three financial statements — accounting rules, EPS calculation, and the critical linkages between them.

Module 3: Ratio Analysis

Liquidity, solvency, leverage, and return ratios studied in a case-study format with real company data. Practical application in investment decision making.

Module 4: Taxation

Deferred Tax Assets and Liabilities, their effect on project finance returns, Tax Loss Carry Forwards, and MAT Calculation.

PART VI — PROJECT FINANCE

Module	Type	Title	Sessions	Hrs
1	**Project Finance**	Start-Up Model	1	2
2	**Project Finance**	Manufacturing Business – 1	1	2
3	**Project Finance**	Manufacturing Business – 2	1	2
4	**Tax**	Tax Modeling – Detailed	2	4
5	**Project Finance**	Full Scale Modeling	3	6
		Total Hours		16

Course Outcomes

- Build a start-up business model for a travel business
- Demonstrate understanding of interest capitalisation
- Model Taxation, its complications, and effects on returns
- Create a multi-sheet business model with all real-world variables
- Assess business feasibility using financial modeling

Module 1: Start-Up Model

Calculating start-up requirements, initial set-up costs, income statement, balance sheet, cash flow reconciliation, and scenario analysis.

▶ *Case Study 15: Travel Agency Model*

Module 2 & 3: Manufacturing Business – 1 & 2

Construction phasing, interest capitalisation, moratorium concept, and return calculation for manufacturing businesses.

▶ *Case Study 16: Manufacturing Business Model – 1*
▶ *Case Study 17: Manufacturing Business Model – 2*

Module 4: Tax Modeling

Tax Loss Carry Forwards, MAT and MAT Credits, DTL & DTA, and how to model these in a comprehensive financial model.

▶ *Case Study 18 & 19: Tax Modeling Cases 1 & 2*

Module 5: Full Scale Model

Complete real-life project finance model covering revenue drivers, cost drivers, construction phasing, debt schedule, asset schedule, taxation, and return calculation.

▶ *Case Study 20: Factory Set-Up Model*

PART VII — EQUITY VALUATION & RESEARCH

Module	Type	Title	Sessions	Hrs
1	Equity Research	Valuation Theories	1	2
2	Equity Research	Data Collection & Reading Annual Reports	1	2
3	Equity Research	Creating Template & Data Filling	1	2
4	Equity Research	Revenue Driver	1	2
5	Equity Research	Cost Driver	2	4
6	Equity Research	Schedule Forecast	3	6
7	Equity Research	Cashflow & Valuation	1	2
8	Equity Research	Report Writing & Storytelling	1	2
		Total Hours		22

Course Outcomes

- Demonstrate understanding of valuation theories and their application
- Read annual reports, identify key components and data sources
- Break down business revenue and cost, then forecast them
- Apply DCF Valuation and Relative Valuation models
- Create a PowerPoint investment thesis presentation

Module 1: Valuation Theories

CAPM, Gordon Growth Model, Relative Valuation concepts, Terminal Value, and WACC calculation.

▶ *Case Study 21: Valuation Practical Case*

Module 2: Data Collection & Reading Annual Reports

How to identify needed data, find reliable sources, and read annual reports efficiently.

▶ *Case Study 22-1: Persistent Business Model*

Module 3: Creating Template & Data Filling

Building appropriate templates based on business requirements and populating financial statements from annual reports.

Module 4: Revenue Driver

Breaking down the business model into price and quantity components and applying this practically to a listed company.

Module 5: Cost Driver

Analyzing cost structures and applying forecasting techniques to project future costs accurately.

Module 6: Schedule Forecast

Forecasting asset schedules, debt schedules, and other financial statement schedules using averaging and trend techniques.

Module 7: Cashflow & Valuation

Compiling all forecasts, calculating DCF valuation with sensitivity analysis on WACC, debt rate, equity rate, and terminal growth rate.

Module 8: Report Writing & Storytelling

Presenting your investment thesis in a structured equity research report format with visual storytelling.

- ▶ *Case Study 22-6: Persistent Business Model – Final Report*

★ NEW — AI LAB MODULES ★

Hands-on AI tools integrated directly into your financial workflows

PART VIII — AI FOR FINANCIAL MODELING

Module	Type	Title	Sessions	Hrs
1	AI Lab	Introduction to AI in Finance	1	2
2	AI Lab	AI-Driven Financial Forecasting	2	4
3	AI Lab	Automating Model Assumptions with AI	1	2
		Total Hours		8

Course Outcomes

- Understand how Generative AI and LLMs can accelerate financial modeling workflows
- Use AI tools to auto-generate model assumptions and driver forecasts
- Integrate AI-assisted scenario analysis into existing Excel models

Module 1: Introduction to AI in Finance

Overview of AI capabilities in finance: LLMs, prompt engineering basics, and mapping AI tools to financial modeling tasks. Understanding ChatGPT, Claude, and Copilot for finance.

Module 2: AI-Driven Financial Forecasting

Using AI to analyze historical data, identify patterns, and generate revenue and cost forecasts. Validating AI output against analyst judgment. Practical lab with real company data.

Module 3: Automating Model Assumptions with AI

Prompting AI to extract assumptions from annual reports, earnings calls, and analyst notes. Building an AI-assisted assumption sheet inside Excel. Scenario sensitivity powered by AI.

PART IX — AI EXCEL AUTOMATION & DASHBOARDS

Module	Type	Title	Sessions	Hrs
1	AI Lab	AI-Powered Formula Writing	1	2
2	AI Lab	Automating Reports with Macros & AI	1	2
3	AI Lab	Dynamic Dashboards with AI Assistance	2	4
		Total Hours		8

Course Outcomes

- Use AI to write complex Excel formulas and debug errors instantly
- Automate repetitive reporting tasks using AI-generated VBA macros
- Build dynamic, interactive dashboards with AI-designed templates

Module 1: AI-Powered Formula Writing

Using AI copilots to write, explain, and optimize Excel formulas. Debugging formula errors using natural language prompts. Advanced functions: LAMBDA, LET, dynamic arrays.

Module 2: Automating Reports with Macros & AI

Generating VBA macros using AI for task automation. Building reusable report templates. Scheduling and triggering automated financial updates without manual intervention.

Module 3: Dynamic Dashboards with AI Assistance

Designing AI-guided executive dashboards. Using AI to select appropriate chart types, color schemes, and layouts. Real-time data connections and auto-refresh techniques.

PART X — AI EQUITY RESEARCH & FINANCIAL ANALYSIS

Module	Type	Title	Sessions	Hrs
1	AI Lab	AI for Annual Report Analysis	1	2
2	AI Lab	AI-Assisted Valuation & Comps	2	4
3	AI Lab	Generating Equity Research Reports with AI	1	2
		Total Hours		8

Course Outcomes

- Use AI to rapidly extract key data from annual reports and earnings calls
- Conduct peer comparisons and relative valuation with AI assistance
- Draft professional equity research reports using AI writing tools

Module 1: AI for Annual Report Analysis

Feeding annual reports and filings into AI tools to extract revenue drivers, risks, and guidance. Building structured databases from unstructured documents. Comparing multiple company filings at scale.

Module 2: AI-Assisted Valuation & Comps

Using AI to screen comparable companies, pull trading multiples, and build DCF assumptions. Validating AI outputs against consensus estimates. AI-powered sensitivity tables and scenario modeling.

Module 3: Generating Equity Research Reports with AI

Prompting AI to draft investment thesis write-ups, executive summaries, and risk sections. Editing and fact-checking AI-generated content. Producing presentation-ready research reports in Word and PowerPoint.

PART XI — AI FOR INVESTMENT BANKING PITCH DECKS & REPORTS

Module	Type	Title	Sessions	Hrs
1	AI Lab	AI-Powered Slide Structuring	1	2
2	AI Lab	Generating Financial Exhibits with AI	1	2
3	AI Lab	AI-Assisted Transaction Reports	2	4
		Total Hours		8

Course Outcomes

- Structure compelling pitch deck narratives using AI story frameworks
- Generate professional-quality financial exhibits and charts with AI
- Produce M&A, IPO, and advisory reports faster using AI drafting tools

Module 1: AI-Powered Slide Structuring

Using AI to outline and structure IB pitch decks for M&A, IPO, and debt advisory mandates. Generating executive summary slides, transaction overviews, and situation analysis pages.

Module 2: Generating Financial Exhibits with AI

AI-assisted creation of football field charts, transaction comps tables, LBO summary pages, and contribution analysis exhibits for pitch books.

Module 3: AI-Assisted Transaction Reports

Drafting information memoranda, CIM sections, and fairness opinion reports using AI. Maintaining accuracy and compliance in AI-generated financial language. Workflow for human review and quality assurance.

ELECTIVE PROJECTS — MINIMUM 3 FROM 11

No.	Elective Project	Hours	Level
1	Road Project Finance Modeling	8	Adv.
2	Port Finance Modeling	6	Adv.
3	Real Estate Modeling	6	Adv.
4	IT Public Listed Modeling	8	Adv.
5	M&A Modeling	4	Adv.
6	LBO Modeling	4	Adv.
7	Excel VBA for Finance	4	Inter.
8	Aviation Business Modeling	12	Adv.
9	Start-Up Business Modeling	12	Adv.
10	Advanced Excel Formulas	4	Inter.
11	Algo Trading Modeling	30	Adv.

PART XII — INTERVIEW PREPARATION (TECHNICAL)- Live Plus Self Paced

Module	Type	Title	Sessions	Hrs
1	**Technical Mocks**	Assessment on FSA & DCF	4	4
2	**Interview Case**	Project Finance	1	2
3	**Interview Case**	Real Estate	1	2
4	**Interview Case**	Common FSA Tests	1	2
5	**Interview Case**	Equity Research	1	2
6	**Face to Face**	Common Questions & How to Answer	1	2
7	**General Market**	General Market Questions	1	2
8	**Practice**	Practice Questions	1	14
		Total Hours		30

PART XIII — APTITUDE TEST INTERVIEW PREPARATION- Self Paced

Module	Type	Title	Sessions	Hrs
1	**Logical Reasoning**	Shapes, Patterns, Sequences	1	2
2	**Verbal Reasoning**	Reading Comprehensions	1	2
3	**Attention to Detail**	Shapes, Memory Tests, Directions	1	2
4	**Numerical**	Sequences, Family Tree, Seating Arrangements	1	2
		Total Hours		8