

Financial Modelling with Valuation Course for Professionals

Week-wise Curriculum Overview

Month 1 – Foundations of Financial Modelling

- Introduction to financial modelling and its applications.
- Excel fundamentals for financial modelling (shortcuts, formatting, and productivity tools).
- Best practices in building structured and error-free models.
- Basics of financial statements: income statement, balance sheet, and cash flow statement.
- Understanding the specific items of income statement, balance sheet, and cash flow statement based on its significance.
- Analysis of income statement, balance sheet, and cash flow statement to identify the red flags.

Month 2 – Advanced Financial Statement Modelling

- Detailed three-statement modelling.
- Linking financial statements and creating dynamic models.
- Key assumptions and drivers for projections.
- Sensitivity analysis and scenario planning.

Month 3 – Valuation Techniques

- Introduction of valuation methodologies as accepted internationally.
- Absolute Method: Discounted Cash Flow (DCF), and Dividend Discount Model. Pros and cons of both the methodology
- Relative Valuation Method: Comparable company analysis (Comps).
- Precedent transaction analysis.
- Introduction to valuation multiples.

Month 4 – Specialized Financial Models and sector specific model

- Mergers & Acquisitions (M&A) modelling (accretion/dilution analysis).
- Leveraged Buyout (LBO) modelling basics.
- Real estate or sector-specific modelling (optional elective).
- Modelling (including forecasting and valuation) of manufacturing company.
- Modelling (including forecasting and valuation) of an IT company.

Month 5 – Risk Analysis and Decision-Making

- Incorporating risk and uncertainty into models.
- Monte Carlo simulations and scenario analysis.
- Building decision trees for complex scenarios.

Month 6 – Capstone Project & Introduction to AI in Financial Modelling

Participants will work on a comprehensive capstone project, integrating all skills learned during the course. This could involve building a full-scale financial model for a hypothetical business or analyzing a real-world company.

Introduction to AI in Financial Modelling:

- Overview of AI technologies in finance: Machine Learning (ML), Deep Learning (DL), Natural Language Processing (NLP).
- Benefits of AI in financial modelling: automation, predictive analytics, real-time insights.
- Common AI tools and platforms for financial modelling (e.g., Clockwork AI, Daloopa, Vena Solutions).

Month 6 – Capstone Project & Introduction to AI in Financial Modelling (contd.)

Data Collection and Preparation for AI Models:

- Collecting historical financial statements, market data, and economic indicators.
- Data cleaning, preprocessing, and feature engineering for AI models.
- Introduction to big data analytics and its applications.

AI-Driven Forecasting and Scenario Analysis:

- Using ML algorithms for predictive analytics and forecasting.
- AI-driven scenario planning and sensitivity analysis.
- Monte Carlo simulations and Bayesian inference models.

Month 6 – Capstone Project & Introduction to AI in Financial Modelling (contd.)

Implementing AI in Financial Models:

- Integrating AI with existing financial systems and tools.
- Best practices for model validation and reporting.
- Case studies of AI in financial modelling (e.g., portfolio optimization, risk management).

AI Deliverables:

- Research paper on the role of AI in modern financial modelling.
- Practical exercise on data preparation using real-world datasets
- Build a simple AI-driven forecasting model using a cloud-based platform
- Present a case study on the successful implementation of AI in financial modelling.