

## **FINANCIAL MODELLING WITH PYTHON AND EXCEL**

### **DETAILED OUTLINE**

#### **1. Introduction to financial modeling**

- Definition and importance of financial modelling
- Types of financial models (DCF, LBO, M&A)
- Best practices in financial modeling

#### **2. Excel fundamentals**

- Excel basics (formulas, functions, formatting)
- Data analysis and visualization (Pivot tables and charts)
- Advanced excel techniques (arrays, formulas, macros)

#### **3. Financial Statement Analysis**

- Understanding financial statements (income statement, balance sheet, cashflow statement)
- Ratio analysis and financial metrics (e.g. ROI, ROE, Debt-to equity)
- Financial statements forecasting

#### **4. Python for Financial Modeling**

- Introduction to python and its libraries (pandas, Numpy, matplotlib)
- Data manipulation and analysis with python
- Financial modeling with python (e.g. DCF, Scenario analysis)

#### **5. Discounted Cashflow Modelling**

- Understanding DCF Methodologies
- Building a DCF model in excel and python
- Sensitivity analysis and scenario planning

#### **6. Advanced Topics**

- Monte carlo simulation
- Option pricing model ( e.g. Black-Scholes)
- Machine learning for financial modeling

### **FEES**

The course attracts a fee of **USD 750** inclusive of tuition, reference materials, certificate of attendance, morning and afternoon teas and lunch