

**Course Name: Fintron****ABOUT THE COURSE**

<b>TOTAL DURATION:</b>	45HRS
<b>MODE OF DELIVERY</b>	PHYSICAL CLASSROOM TRAINING AT RESPECTIVE COLLEGES
<b>TRAINER TO STUDENT RATIO:</b>	1:50
<b>TOTAL MARKS:</b>	75

**TABLE 1**

<b>OVERALL COURSE OBJECTIVE :</b>	<ul style="list-style-type: none"><li>• Enable learners to evaluate investment opportunities and make informed investment decisions.</li><li>• Manage and handle large, medium, and small financial management scenarios such as financial planning, cost of capital, investment decisions, working capital management, and risk management and should be able to make ideal financial decisions.</li><li>• Calculate the Accounting Rate of Return, Payback Period, Net Present Value, Internal Rate of Return, and Profitability Index.</li><li>• Analyze financial markets using technical analysis tools, including candlestick charts, support and resistance lines, and chart patterns.</li><li>• Evaluate risk management strategies, including operating leverage, financial leverage, and combined leverage.</li><li>• Evaluate and implement appropriate strategies into currency markets, exchange rates, fixed and floating exchange rate regimes, and factors affecting exchange rates. Interpret the dynamics of commodity exchanges, trading instruments, and strategies and implement them in the live market.</li><li>• Implementation of robo advisory in derivatives trading, coding logic for robo advisory based on technical analysis, data analysis, and machine learning in trading strategies.</li></ul>
<b>LEARNING OUTCOME:</b>	<ul style="list-style-type: none"><li>• Identify the goals of Financial Management and their importance for organizations. Demonstrate the process of Financial Planning and the steps involved</li></ul>

	<ul style="list-style-type: none"> <li>• Recognize different types of charts and understand their evolution. Utilize Candlestick charts for analysis, identifying bullish and bearish candle patterns</li> <li>• Evaluate the basics of options, moneyness, and payoff charts for options</li> <li>• Execute the mechanics of currency futures trading and pricing. Analyze the commodity market, including exchanges, instruments, and trading strategies. Recognize the risk management and settlement processes in commodity trading.</li> <li>• Develop coding logic for Robo Advisory based on Technical Analysis (TA). Apply data analysis and machine learning techniques in Derivatives Trading.</li> </ul>
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<b>TABLE 2: MODULE-WISE COURSE CONTENT AND OUTCOME</b>				
<b>SL .N O</b>	<b>MODULE NAME</b>	<b>MODULE CONTENT</b>	<b>MODULE LEARNING OUTCOME</b>	<b>DURATI ON (HRS)</b>
1.	<b>Unit 1: Financial Management</b>	<p><b>1.1: Introduction to Financial Management</b></p> <p>Meaning and Definition of financial Management   Goals of Financial Management   Financial Planning   Steps in Financial Planning   Factors Affecting Financial Plans   Time Value of Money</p> <p><b>1.2: Investment decisions</b></p> <p>Introduction to Capital Budgeting   Importance of capital Budgeting   Capital Budgeting Process   Techniques of Capital Budgeting - Accounting Rate of Return   Pay Back</p>	Design the process of Financial Planning and the steps involved	9 hours

		<p>Period   Net Present Value  </p> <p>Internal Rate of Return and Profitability Index</p> <p><b>1.3: Working Capital Management</b></p> <p>Cost of Capital - Cost of Debt   Cost of Preference Shares   Cost of Equity Shares   Cost of Retained Earnings   Weighted Average Cost of Capital</p> <p><b>1.4: Financial decision making</b></p> <p>Introduction – Concepts of Working Capital   Objective of Working Capital Management   Need for Working Capital   Operating Cycle   Determinants of Working Capital   Estimation of Working Capital.</p> <p><b>1.5: Leverage and Risk Management</b></p> <p>Leverages – Introduction   Types of Leverages   Measurement of Operating Leverage   Financial Leverage and Combined Leverage</p>		
2.	<b>Unit 2: Technical and Renko Analysis</b>	<p><b>2.1: Introduction to Technical Analysis and Candle Charts</b></p> <p>What is technical analysis?   Strengths and weakness of technical analysis   Importance of technical</p>	Recognize different types of charts and understand their evolution. Utilize Candlestick charts for analysis,	9 hours

		<p>analysis   Types of charts and its evolution   Introduction to Candlestick (Bullish &amp; Bearish candle)  Candlestick analysis  One candle pattern   Two candle pattern   Three candle pattern</p> <p><b>2.2: Pattern study approach</b></p> <p>What are support and resistance lines?   Head and shoulders   Double top and double bottom   Gap theory</p> <p><b>2.3: Indicator Analysis</b></p> <p>What does a technical indicator offer?   Types of indicators   Simple moving average   Exponential moving average   Trend following indicator</p> <p><b>2.4: Introduction to Renko analysis</b></p> <p>Construction Of Renko Charts   Brick Value   Time Frame   Brick Reversal Pattern</p> <p><b>2.5: 5 Indicator logic for technical research</b> EMA crossover   SMA Crossover   BB + RSI   BB + ROC   Pivot Levels</p>	<p>identifying bullish and bearish candle patterns</p>	
3.	<b>Unit 3: Derivatives and types of contracts</b>	<p><b>3.1: Derivatives and types of contracts</b></p> <p>Basics of Derivatives   Derivatives Market -</p>	<p>Evaluate the options, moneyness, and</p>	9 hours

		<p>History &amp; Evolution   Market Participants   Types of Derivatives Market   Significance of Derivatives</p> <p><b>3.2: Futures and Forwards segment</b></p> <p>Futures and Forwards Contracts   Payoff charts for Futures Contract   Futures pricing   Commodity, equity &amp; Index Futures   Uses of Futures</p> <p><b>3.3: Options segment</b></p> <p>Basics of Options   Characteristics of Options   Moneyness of Options   Payoff charts for Options</p> <p><b>3.4: Open interest and Greeks methodology</b></p> <p>Option chain and Open Interest   Introduction of Greeks in Options segment   Trading Psychology in NFO segment</p> <p><b>3.5: NISM Equity Derivatives series VIII Dealers Module</b></p> <p>NISM Equity Derivatives series VIII Dealers Module overview   Role of an Equity Dealer   Do's Don't of an Equity dealer</p>	<p>payoff charts for contracts</p> <p>Derive the future segment pricing for equity and Index</p>	
4.	<b>Unit 4: Currency and</b>	<b>4.1: Introduction to Currency Market</b>	Execute the mechanics of currency futures trading and	9 hours

	<p><b>Commodity Derivatives</b></p>	<p>Currency Markets   Exchange Rate   Fixed and Floating Exchange Rate Regime   Factors affecting Exchange Rates   Quotes and Tick size   Spreads   Spot Transaction and Forward Transaction</p> <p><b>4.2: Currency Future trading mechanism</b></p> <p>Forward Contracts   Futures Contracts   Pricing of Futures Contracts</p> <p><b>4.3: Commodity Trading system</b></p> <p>Commodity Exchanges   Trading Participants and their Roles   Trading Instruments in the Commodity Market   Trading Strategies in the Commodity Market   Risk Management in Commodity Trading   Settlement and Delivery in Commodity Trading</p> <p><b>4.4: Global Financial Market-CFD</b></p> <p>Global Financial Market   Understanding CFDs   Advantages and Disadvantages of CFD Trading   Popular Commodities for CFD Trading   Regulatory Environment for CFD Trading   Trading Platforms for CFDs   MT4 –</p>	<p>pricing. Analyze the commodity market, including exchanges, instruments, and trading strategies. Recognize the risk management and settlement processes in commodity trading.</p>	
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		Meta Trader4 Trading technology.		
5.	<b>Unit 5: Robo Advisory in Derivatives</b>	<p><b>5.1: Introduction to Robo Advisory in Derivatives</b></p> <p>Introduction to Robo Advisory   Benefits of Robo Advisory in Derivatives   Challenges and Risks   Types of Derivative Strategies in Robo Advisory   Legal and Regulatory Considerations</p> <p><b>5.2: Coding logic for Robo advisory based on TA</b></p> <p>Data Collection   Data Preprocessing   Logical Codes   Signal Generation   Risk Management   Back testing   Execution   Real-time Monitoring</p> <p><b>5.3: Data Analysis and Machine Learning in Derivatives Trading</b></p> <p>Machine Learning Basics   High-frequency vs. low-frequency trading   Predictive modeling using machine learning</p> <p><b>5.4: Future Trends and Developments</b></p> <p>Digital Transformation   Blockchain and cryptocurrencies   Peer-to-peer lending and crowdfunding   Reg Tech (regulatory technology)   Chatbots and virtual assistants</p>	Develop coding logic for Robo Advisory based on Technical Analysis (TA). Apply data analysis and machine learning techniques in Derivatives Trading.	9 hours

		<p><b>5.5: Regulatory and Ethical Advisory</b></p> <p>Securities regulations and compliance   Licensing and registration requirements   Regulatory bodies overseeing robo-advisors   Ethical guidelines for automated financial advice</p>	
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<b>TABLE 3: OVERALL COURSE LEARNING OUTCOME ASSESSMENT CRITERIA AND USE CASES</b>		
<b>LEARNING OUTCOME</b>	<b>ASSESSMENT CRITERIA</b>	<b>USE CASES</b>
Design the process of Financial Planning and the steps involved	<ul style="list-style-type: none"> <li>• Make an ideal financial decision</li> <li>• Manage and handle large, medium, and small financial management scenarios such as financial planning, cost of capital, investment decisions, working capital management, and risk management</li> </ul>	<p><b>Use Case 1:</b> Navigating Turbulence: A Case Study on Jet Airways' Rise, Challenges, and Strategies in the Aviation Industry.</p> <p><b>Use Case 2:</b> Revitalizing Wings: A Strategic Analysis of Tata's Takeover of Air India in the 21st Century.</p>
Recognize different types of charts and understand their evolution. Utilize Candlestick charts for analysis, identifying bullish and bearish candle patterns	<ul style="list-style-type: none"> <li>• Calculate the Accounting Rate of Return, Payback Period, Net Present Value, Internal Rate of Return, and Profitability Index</li> <li>• Evaluate investment opportunities and make decisions</li> </ul>	<p><b>Use Case 1:</b> Navigating Market Volatility: A Real-Time Analysis of Equity Derivatives Strategies in the Post-Pandemic Era</p> <p><b>Use Case 2:</b> Unveiling the Orchestrated Deceit: Scam Unfolding in the MCX Spot Exchange in India</p>



	<ul style="list-style-type: none"> <li>• Construct Renko Charts</li> </ul>	
Evaluate the basics of options, moneyness, and payoff charts for options	<ul style="list-style-type: none"> <li>• Analyze the psychology in NFO Segments before trading</li> <li>• Using technical analysis tools, including candlestick charts, support and resistance lines, and chart patterns to analyze the financial market</li> </ul>	<p><b>Use Case 1:</b> Impact of COVID-19 on Crude Oil Prices – A Real-Time Case Study on the Unprecedented Dive into Negatives</p> <p><b>Use Case 2:</b> The Unprecedented Plunge: A Case Study on Broker Losses Due to Negative Commodity Pricing in Crude Oil During the COVID-19 Pandemic</p>
Execute the mechanics of currency futures trading and pricing. Analyze the commodity market, including exchanges, instruments, and trading strategies. Recognize the risk management and settlement processes in commodity trading.	<ul style="list-style-type: none"> <li>• Implement strategies in trading platforms CFDs</li> <li>• Evaluate appropriate risk management strategies into currency markets, exchange rates, fixed and floating exchange rate regimes, and factors affecting exchange rates</li> <li>• Interpret the dynamics of commodity exchanges and trading instruments in the live market</li> </ul>	<p><b>Use Case 1:</b> Strategic Currency Risk Management through Currency Derivatives: A Case Study of SLK Software Solutions</p> <p><b>Use Case 2:</b> SEBI Investigation on Options Trading: A Case Study on Loss-Making Transactions</p>
Develop coding logic for Robo Advisory based on Technical Analysis (TA). Apply data analysis and machine learning	<ul style="list-style-type: none"> <li>• Prepare coding logic for robo advisory based on technical analysis, data analysis, and</li> </ul>	<p><b>Use Case 1:</b> Unlocking Financial Success: A Strategic Case Study on Maximizing Returns with</p>

techniques in Derivatives Trading.	<p>machine learning in trading strategies</p> <ul style="list-style-type: none"> <li>Implementation of robo advisory in derivatives trading</li> </ul>	<p>Advanced Options Strategies</p> <p><b>Use Case 2:</b> Revolutionizing Investment Strategies on the Impact of Robo-Advisory in Derivatives Trading</p>
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**TABLE 4: LIST OF FINAL PROJECTS (20 PROJECTS THAT COMPREHENSIVELY COVER ALL THE LEARNING OUTCOME)**

SL. NO	FINAL PROJECT
1.	Utilizing R, perform a comprehensive analysis of the Net Present Value (NPV) in capital budgeting for a hypothetical project. Include time value of money considerations and demonstrate how R can be used to calculate and visualize NPV. Discuss the significance of NPV in investment decision-making.
2.	Choose a set of stocks and conduct a thorough analysis using R. Import relevant financial data, visualize multiple stocks, and apply technical analysis techniques. Highlight the differences in stock prices and discuss the implications. Provide insights into the comparison analysis and how R facilitates stock market analytics.
3.	Perform bond valuation using R, considering different types of bonds. Illustrate the steps involved in bond valuation and showcase how R can be utilized for this purpose. Extend the analysis to explore more advanced aspects of bond valuation and discuss their impact on investment decisions.
4.	Implement the Capital Asset Pricing Model (CAPM) in R, emphasizing the basic concepts of finance. Code the CAPM equation in R, plot the development of prices, and explore the creation of portfolios with multiple risky assets. Discuss the implications of portfolio weights and the construction of possible portfolios.
5.	Perform fundamental analysis using R, focusing on financial ratios. Choose a company and analyze its financial health by calculating and interpreting key ratios. Discuss the significance of these ratios in assessing a company's performance and make recommendations based on the fundamental analysis conducted in R
6.	As a technical Analyst, analyze the historical stock prices of a company using candlestick charts. Identify and interpret different candlestick

	patterns, including bullish and bearish candles, and explain their significance in predicting price movements. Discuss how a trader or investor can use candlestick analysis for decision-making.
7.	Choose a stock or market index from Nifty Next50 Index and conduct a technical analysis to identify support and resistance lines. Explain the importance of recognizing these patterns in the context of trading strategies.
8.	Develop and back test a trading strategy using the 2 indicator logics: EMA crossover, SMA crossover, provide a detailed rationale for each strategy, including entry and exit criteria. Analyze the historical performance of these strategies and discuss potential improvements or modifications.
9.	As a Technical advisor for short term investment of 30-60 days investment horizon, identify 3 company for each of these technical logic BB + RSI, BB + ROC and Pivot Levels. and take screenshot of the charts using Investing.com and prepare a detailed report.
10.	Construct a Renko chart for a specific stock or currency pair. Define and explain the concepts of brick value, time frame, and brick reversal pattern in Renko analysis. Evaluate the advantages and disadvantages of using Renko charts compared to traditional candlestick charts for technical analysis.
11.	Develop a comprehensive analysis of the derivatives market, focusing on its history, evolution, and the types of contracts involved. Identify the key participants in the derivatives market and analyze the significance of derivatives in risk management. Provide a report on how derivatives are used in different market scenarios.
12.	Choose a specific commodity, equity, or index and compare the features of futures and forward contracts. Construct payoff charts for futures contracts and explain the pricing mechanism for futures. Investigate the uses of futures in hedging, speculation, and arbitrage, providing real-world examples.
13.	Create moneyness chart for different Option strike prices for both CALL and PUT options with practical examples.
14.	You a derivative trader, analyze the concept of open interest in the options market and its implications for traders. Introduce the Greeks (Delta, Gamma, Theta, and Vega) and explain how they impact option pricing and risk. Provide a trading performance psychology report associated with options trading, focusing on the NFO segment.
15.	Explore the commodity market, including commodity exchanges, trading participants, and various instruments traded in this market. Analyze trading strategies employed in the commodity market and

	discuss the role of risk management in commodity trading. Provide insights into settlement and delivery processes in commodity trading.
16.	Analyze the regulatory environment for governing CFD trading globally and explore different trading platforms, with a specific emphasis on Meta Trader 4 (MT4) technology.
17.	Analyze the global financial market with a focus on Contracts for Difference (CFDs) and the advantages and disadvantages of CFD trading. Identify popular commodities for CFD trading and execute the process with a predictive model
18.	Analyze the currency market, exploring the concepts of exchange rates, fixed and floating exchange rate regimes, and factors affecting exchange rates. Discuss the quotes and tick size, spreads, and differences between spot and forward transactions. Provide examples to illustrate how changes in these factors impact currency trading.
19.	Develop a coding logic for robo advisory based on technical analysis based on the classroom training. Outline the steps involved in data collection, preprocessing, and the logical codes used for signal generation. Discuss the importance of risk management in robo advisory and describe the processes of backtesting, execution, and real-time monitoring.
20.	Compare high-frequency and low-frequency trading strategies. Develop a predictive model using machine learning for derivatives trading, considering historical data.

**TABLE 5: COURSE ASSESSMENT RUBRICS (TOTAL MARKS: 75)**

ASSESSMENT CRITERIA	DESCRIBE THE CRITERIA OF THE BELOW CATEGORY PERFORMANCE			TOTAL MARKS
	FAIR	GOOD	EXCELLENT	
<b>MCQ EXAM</b>	10	10	10	30
<b>PROJECT SUBMISSION</b>	10	15	20	45