



**Certified Investment & Portfolio Analyst**





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### Introduction:

The Certified Investment and Portfolio Analyst course equips participants with rigorous theoretical foundations and practical insights into investment analysis and portfolio construction. It balances risk assessment, valuation techniques, asset allocation strategies, and performance measurement. Learners refine decision-making in diversified portfolios under real-world constraints.

This Certified Investment and Portfolio Analyst program emphasizes analytical thinking, critical judgment, and disciplined portfolio design. This training fosters a deep understanding of equity, fixed income, alternative assets, and risk governance. Participants will assume roles in investment analysis, portfolio management, or advisory functions.

### Targeted Groups:

This Certified Investment and Portfolio Analyst training targets professionals seeking specialized knowledge and skills:

- Finance analysts aiming to deepen portfolio theory skills.
- Portfolio managers seeking to systematize strategy.
- Investment advisors enhancing client outcomes.
- Risk professionals expanding into portfolio risk.
- Asset management associates want advanced frameworks.
- Institutional investors' staff need structured methods.

### Course Objectives:

Participants will achieve the following objectives by completing the Certified Investment and Portfolio Analyst course:

- Master valuation techniques for equities, fixed income, and alternative investments.
- Assess and quantify risk factors, correlations, and tail risks.
- Develop optimal asset allocation and portfolio diversification strategies.
- Apply performance attribution and benchmarking analysis rigorously.
- Construct and backtest model portfolios under constraints.
- Interpret macroeconomic indicators and incorporate them into investment decisions.
- Evaluate investment proposals by applying due diligence and scenario analysis.
- Communicate investment recommendations clearly to stakeholders.

## Targeted Competencies:

Participants will gain the following competencies during the Certified Investment and Portfolio Analyst program:

- Skill in applying modern portfolio theory and mean-variance optimization.
- Capability to perform multi-asset valuation and relative value comparisons.
- Competence in measuring and managing market, credit, liquidity, and model risks.
- Fluency with performance attribution, benchmark selection, and risk-adjusted return metrics.
- Ability to integrate macroeconomic and factor models into portfolio design.
- Expertise in scenario analysis, stress testing, and Monte Carlo simulation.
- Facility with portfolio rebalancing, transaction cost modeling, and liquidity constraints.

## Studying Scenarios:

In this Certified Investment and Portfolio Analyst training, participants will develop their skills through the analysis of the following scenarios:

- Building a global equity/bond portfolio under volatility stress.
- Comparing performance attribution between active and passive strategies.
- Assessing a hedge fund allocation under liquidity constraints.
- Stress-testing a fixed-income portfolio in rising interest rate regimes.
- Evaluating alternative investments' contribution to diversification.
- Running a Monte Carlo scenario for a retirement-horizon portfolio.

## Course Content:

### Unit 1: Foundations of Investment Theory & Market Structure:

- Overview of financial markets, instruments, and participants.
- Risk and return fundamentals, capital market line, and security market line.
- Efficient market hypothesis and behavioral critiques.
- Modern portfolio theory, diversification, and efficient frontier.
- Capital asset pricing model CAPM and factor models.
- Multifactor models Fama-French, Carhart, etc..
- Market microstructure, liquidity, and transaction cost effects.

## Unit 2: Valuation Methods & Asset Pricing:

- Discounted cash flow DCF valuation and free cash flow models.
- Dividend discount models and residual income models.
- Comparable company valuation and multiples P/E, EV/EBITDA.
- Fixed income valuation: yield curves, duration, convexity.
- Credit spreads, credit risk models, and default probabilities.
- Valuation of alternatives: REITs, private equity, hedge funds.
- Factor investing, style premia, and smart beta.

## Unit 3: Risk Measurement & Portfolio Construction:

- Variance, covariance, correlation, and covariance matrices.
- Value at Risk VaR, Conditional VaR, and tail risk measures.
- Stress testing, scenario analysis, and sensitivity analysis.
- Mean-variance optimization with constraints.
- Portfolio optimization with transaction costs, liquidity, and turnover.
- Robust portfolio construction and shrinkage techniques.
- Factor risk decomposition and risk parity strategies.

## Unit 4: Performance Measurement & Attribution:

- Return decomposition: arithmetic vs geometric returns.
- Benchmarking and choice of benchmark.
- Performance attribution: allocation, selection, and interaction effects.
- Risk-adjusted metrics: Sharpe ratio, Information ratio, Treynor, Sortino.
- Multi-period return chaining and link analysis.
- Style analysis, factor attribution, and regression approaches.
- Evaluating active vs passive performance.

## Unit 5: Strategic & Tactical Portfolio Management:

- Top-down macro allocation vs bottom-up security selection.
- Dynamic asset allocation, tactical tilts, and overlay strategies.
- Rebalancing rules and path dependency.
- Liability-driven investment LDI and target-date portfolios.
- Portfolio construction under ESG / sustainable investing constraints.
- Alternative strategies include hedge funds, commodities, and private credit.
- Implementation challenges include transaction costs, slippage, and liquidity issues.

## Final Insights & Key Takeaways:

Graduates will leave with a robust theoretical and applied framework for designing, evaluating, and managing complex portfolios. They will assume roles in investment analysis, asset management, and advisory functions.