INVESTMENT RISK MANAGEMENT

COURSE OVERVIEW

This course offers a comprehensive exploration of investment risk management, focusing on key concepts and practical techniques used in the investment management process. Participants will gain an understanding of factor theory and its application in portfolio construction, learn about various portfolio risk measures, and delve into risk budgeting and monitoring strategies. The course also covers performance measurement and analysis techniques, including portfolio-based performance analysis, and provides insights into the role of hedge funds in investment risk management.
This course equips participants with the tools and skills necessary to effectively manage investment risks and enhance portfolio performance.

TARGET COMPETENCIES

- Risk Identification
- Portfolio Construction
- Risk Measurement
- Risk Budgeting
- Performance Analysis
- Hedge Fund Strategies

COURSE OBJECTIVES

By completing this course, participants will be able to:

- Understand the principles of investment risk management.
- Apply factor theory in portfolio construction.
- Measure and analyze portfolio risk using various metrics.
- Implement risk budgeting techniques.
- Monitor and adjust portfolio risk levels.
- Evaluate portfolio performance through comprehensive analysis.
- Explore the role and strategies of hedge funds in risk management.
- Develop strategies for managing investment risk effectively.

TARGET AUDIENCE

- Investment Managers
- Financial Analysts
- Portfolio Managers
- Risk Management Professionals
- Finance Students

COURSE METHODOLOGY

The course uses a blend of lectures, case studies, practical exercises, and group discussions. Participants will engage with real-world scenarios and data to apply theoretical concepts in practical settings. Interactive sessions and problem-solving activities will enhance learning and ensure that participants can translate knowledge into actionable strategies.

COURSE OUTLINE

INTRODUCTION TO INVESTMENT RISK MANAGEMENT

- Fundamentals of Risk Management.
- Risk Management Frameworks.
  - ERM (Enterprise Risk Management).
  - ORM (Operational Risk Management).
- Regulatory Environment.
  - Key Regulations and Standards.
  - Impact on Investment Practices.
- Case Studies.

FACTOR THEORY AND PORTFOLIO CONSTRUCTION

- Understanding Factor Theory.
- Factor Models.
- Portfolio Construction Techniques.
  - Diversification Strategies.
  - Asset Allocation Models.
- Practical Applications.

PORTFOLIO RISK MEASURES

- Key Risk Metrics.
  - Standard Deviation and Variance.
  - Value at Risk (VaR).
- Advanced Risk Measures.
  - Conditional VaR (CVaR).
  - Beta and Alpha.
- Scenario and Stress Testing.
- Practical Exercises.
  - Calculating and Analyzing Risk Metrics.
  - Applying Risk Measures to Portfolios.

RISK BUDGETING

- Principles of Risk Budgeting.
  - Definition and Importance.
  - Allocating Risk Across Portfolios.
- Techniques and Tools.
- Implementing Risk Budgets.
- Case Studies.

RISK MONITORING AND PERFORMANCE MEASUREMENT

- Ongoing Risk Monitoring.
  - Tools and Techniques.
  - Key Risk Indicators (KRIs).
- Performance Measurement.
  - Metrics and Benchmarks.
  - Sharpe Ratio, Information Ratio.
- Performance Attribution.
- Practical Applications.

PORTFOLIO-BASED PERFORMANCE ANALYSIS

- Introduction to Performance Analysis.
- Attribution Analysis.
  - Return Attribution.
  - Risk Attribution.
- Benchmarking and Comparison.
- Practical Exercises.

HEDGE FUNDS AND RISK MANAGEMENT

- Overview of Hedge Funds.
- Risk Management in Hedge Funds.
  - Identifying and Mitigating Risks.
  - Use of Leverage and Derivatives.
- Hedge Fund Performance Analysis.