# Market Risk Measurement and Management Training Course

Professional Development Training Course Outline

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|---|---|---|---|
| **Category** | Risk Management | **Duration** | 10 Days |
| **Base Fee** | $3,000 USD | **Delivery Mode** | Online / On-site Hybrid |

## Course Introduction

Market risk is the systematic uncertainty inherent in financial markets, posing a direct threat to an organization's earnings and capital position. In the wake of increasing financial volatility, evolving macroeconomic conditions, and stringent global regulatory frameworks, the demand for sophisticated risk quantification and proactive management strategies has never been higher. Market Risk Measurement and Management Training Course provides a deep dive into the latest analytical techniques moving beyond traditional VaR to embrace measures like Expected Shortfall (ES) while also exploring the integration of new technologies like AI-driven risk modeling and the critical importance of data governance.

The training is structured to bridge the gap between theoretical models and practical risk execution. Participants will gain mastery over the core concepts of fixed income, equity, FX, and commodity risk and their aggregation within an Enterprise Risk Management (ERM) context. By focusing on stress testing, scenario analysis, and the development of robust risk appetite frameworks, delegates will be empowered to make capital allocation decisions that align with strategic objectives, ensuring regulatory compliance and fostering sustainable financial resilience in a rapidly digitizing and interconnected global market.

## Programme Curriculum

**Market Risk Measurement and Management Training Course**

**Introduction**

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**Course Duration**

10 days

**Course Objectives**

Upon completion, participants will be able to:

1. Quantify and interpret Value-at-Risk (VaR) and Expected Shortfall (ES) across asset classes.
2. Design and implement advanced Stress Testing and Scenario Analysis programs, including Reverse Stress Testing.
3. Evaluate the impact of Basel IV (FRTB) and modern Regulatory Capital requirements on the trading book.
4. Apply Volatility Modeling techniques, including GARCH and implied volatility from options, for more accurate risk forecasts.
5. Master the measurement and hedging of Interest Rate Risk and FX Risk.
6. Understand and manage Liquidity-Adjusted VaR (LVaR) and its role in crisis management.
7. Integrate Climate Risk and ESG factors into the market risk assessment framework.
8. Utilize Python/R for Financial Modelling and Quantitative Risk Analysis in a practical environment.
9. Develop a robust Risk Appetite Framework and implement effective Limit Setting and Risk Budgeting.
10. Conduct effective Model Risk Management through Backtesting and Model Validation.
11. Analyze and mitigate the risks associated with complex financial instruments, including Derivatives and Structured Products.
12. Establish an integrated Risk Reporting Framework using advanced Risk Dashboards and Visualization.
13. Discuss and anticipate the role of AI/Machine Learning in next-generation market risk prediction.

**Target Audience**

1. Market Risk Analysts/Managers
2. Financial Risk Consultants
3. Treasury and Asset-Liability Management (ALM) Professionals
4. Quantitative Analysts (Quants) and Model Developers
5. Regulators and Compliance Officers
6. Portfolio Managers and Investment Strategists
7. Internal Auditors and Risk Assurance Specialists
8. Senior Management/Board Members

**Course Modules**

**Module 1: Foundations of Market Risk Management**

- Key Risk Distinction.

- Risk Governance.
- Enterprise Risk Management (ERM).
- Mark-to-Market vs. Accrual Accounting.
- Case Study: Orange County Crisis (1994).

**Module 2: Value-at-Risk (VaR) Methodologies**

- VaR Definition and Interpretation.
- Parametric VaR (Variance-Covariance)
- Historical Simulation VaR.
- Monte Carlo Simulation VaR.
- Case Study: J.P. Morgan's RiskMetrics.

**Module 3: Beyond VaR: Coherent Risk Measures**

- Expected Shortfall (ES) / Conditional VaR (CVaR).
- Spectral Risk Measures.
- Marginal VaR (MVaR) and Component VaR (CVaR).
- Liquidity-Adjusted VaR (LVaR)
- Case Study: Post-GFC Shift.

**Module 4: Volatility and Correlation Modeling**

- Volatility Estimation
- GARCH Models (Generalized Autoregressive Conditional Heteroskedasticity).
- Correlation Breakdown.
- Implied Volatility.
- Case Study: Tequila Crisis (1994-95) & Asian Financial Crisis (1997).

**Module 5: Interest Rate Risk Measurement**

- Duration and Convexity.
- Yield Curve Risk.
- Basis Risk and Spread Risk
- IRRBB (Interest Rate Risk in the Banking Book).
- Case Study: Savings and Loan Crisis (1980s).

**Module 6: FX and Commodity Risk Analysis**

- Foreign Exchange Risk.
- Commodity Price Volatility.
- Cross-Currency Correlation.
- Rolling Hedges and Optimal Hedge Ratios.
- Case Study: Metallgesellschaft Debacle (1993).

**Module 7: Derivatives and Hedging Strategies**

- Greeks (Delta, Gamma, Theta, Vega, Rho).
- Hedging with Futures and Forwards.
- Hedging with Options.
- Exotic Derivatives Risk.
- Case Study: Barings Bank Collapse (1995).

**Module 8: Stress Testing and Scenario Analysis**

- Historical Scenarios
- Hypothetical Scenarios
- Reverse Stress Testing.
- Model Implementation.
- Case Study: European Sovereign Debt Crisis (2010-2012).

**Module 9: Regulatory Market Risk: Basel Frameworks**

- Basel II.5/III Overview.
- Fundamental Review of the Trading Book (FRTB).
- Non-Modellable Risk Factors (NMRF).
- P&L Attribution and Backtesting.
- Case Study: FRTB Implementation Challenges.

**Module 10: Model Risk Management (MRM)**

- Model Validation Lifecycle.
- Backtesting and Traffic Light Zones.
- Pillar 2 and ICAAP.
- Data Quality and Data Governance.
- Case Study: Financial Crisis of 2008.

**Module 11: Quantitative Risk Tooling and Programming**

- Python/R for Risk Analytics.
- Financial Data Sourcing
- Risk Visualization.
- Machine Learning (ML) in Risk.
- Case Study: Building a Portfolio VaR Calculator.

**Module 12: Risk Appetite and Limit Setting**

- Defining Risk Appetite.
- Risk Budgeting.
- Limit Structures.
- Escalation and Remediation.
- Case Study: AIB Trading Scandal (2002).

**Module 13: Non-Financial Risks and Market Dynamics**

- Climate Risk (Physical and Transition).
- Integrating factors into portfolio risk screening.
- Cyber and Technology Risk.
- Operational Resilience
- Case Study: COVID-19 Pandemic Shock (2020).

**Module 14: Capital Allocation and Performance Measurement**

- Risk-Adjusted Return on Capital (RAROC).
- Economic Capital vs. Regulatory Capital.

- Shareholder Value Creation.
- Portfolio Optimization.
- Case Study: Strategic Capital Decision.

**Module 15: Advanced Topics and Future Trends**

- AI/ML in Algorithmic Trading Risk.
- Blockchain and Digital Asset Risk.
- Systemic Risk and Interconnectedness.
- Culture and Ethics in Risk.
- **Case Study: Archegos Capital Management Collapse (2021)**

**Training Methodology**

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

**Register as a group from 3 participants for a Discount**

**Send us an email: info@fineskilltrainingcenter.org or call** +254769199797

**Certification**

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

**Tailor-Made Course**

We also offer tailor-made courses based on your needs.

**Key Notes**

**a.** The participant must be conversant with English.

**b.** Upon completion of training the participant will be issued with an Authorized Training Certificate

**c.** Course duration is flexible and the contents can be modified to fit any number of days.

**d.** The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

**e.** One-year post-training support Consultation and Coaching provided after the course.

**f.** Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

## Upcoming Scheduled Sessions

| Start Date | End Date | Location | Price |
|---|---|---|---|
| **23 Nov 2026** | 04 Dec 2026 | Online | $2,000 |
| **23 Nov 2026** | 04 Dec 2026 | Physical | $3,000 |
| **23 Nov 2026** | 04 Dec 2026 | Physical | $6,000 |
| **23 Nov 2026** | 04 Dec 2026 | Physical | $6,000 |
| **23 Nov 2026** | 04 Dec 2026 | Physical | $12,000 |
| **23 Nov 2026** | 04 Dec 2026 | Physical | $9,000 |
| **23 Nov 2026** | 04 Dec 2026 | Physical | $12,000 |
| **23 Nov 2026** | 04 Dec 2026 | Physical | $12,000 |

Ready to enroll or request a customized program? Book online or contact us:

**Register Online Now**

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com