Masters in High Frequency Finance

Summary

A 12-month graduate school program designed to provide students with a comprehensive understanding of the current theory and practice of modeling, trading and risk management in high frequency financial markets.

The program will offer students a thorough grounding in the modeling concepts, trading strategies and risk management procedures currently in use by leading investment banks, proprietary trading firms and hedge funds in US and international financial markets. Students will also learn the necessary programming and systems design skills to enable them to make an effective contribution as quantitative analysts, traders, risk managers and developers.

Program Content (Core Courses and Electives)

- 1. Financial Markets
- 2. Trading
- 3. Execution
- 4. Financial Market Participants & Structures
- 5. Regulation & Compliance
- 6. Mathematics of High Frequency Finance
- 7. High Frequency Data Management & Analysis
- 8. Econometric Modeling & Forecasting
- 9. Non-linear Modeling Techniques
- 10. Market Microstructure
- 11. Liquidity
- 12. News
- 13. Trading Infrastructure
- 14. Latency
- 15. System Design for HFT Systems
- 16. Programming
- 17. Trading Strategy Design & Testing
- 18. Arbitrage Strategies
- 19. Market Making Strategies
- 20. Algorithmic Trading Strategies
- 21. Alpha Generation Strategies
- 22. Trade & Cost Analysis
- 23. Performance Evaluation
- 24. Risk Management