
Electronic Trading and Algorithmic Execution

A practical 2-day course presented by Jamie Walton

An analysis of the current state of electronic trading in both Equities and Fixed Income markets with a close look at the electronic Foreign Exchange markets.

The first day of the programme looks at the nature of electronic markets and examines different types of orders and algorithmic execution. Day two focuses on electronic market-making and the market microstructure, examining both the market risks and regulatory challenges.

Practical workshops allow delegates to explore the implementation of a market-making engine.

Learning Objectives:

- Gain familiarity with the landscape of electronic markets
- Distinguish between different types of exchanges and order types
- Learn how to calculate the costs associated with different types of orders in terms of spread and execution certainty
- Analyse the various methods of algorithmic execution
- Learn how to design a market-making engine
- Acquire knowledge of the market microstructure and of how to benefit from this
- Gain understanding of current regulations with regards to electronic trading

Who the course is for

- Quants/ Financial Engineers
- Electronic traders and book-runners
- Electronic trading technologists/ developers
- Algorithmic Traders
- Execution desks
- Sales People
- Risk Managers, Structurers
- Researchers

Prior knowledge

A basic understanding of capital markets and securities trading.

About LFS

London Financial Studies is a specialist teaching resource concentrating exclusively on capital markets. Our course leaders have extensive practical experience in derivatives, quantitative analysis and econometrics.



Electronic Trading and Algorithmic Execution

A practical 2-day course presented by Jamie Walton

Course Leader Jamie Walton

Dr Jamie Walton has over 18 years of experience as a quant in financial markets. For the last 10 years, he was the head FX quant at Morgan Stanley, where he built the team of FX electronic trading quants.

In recent years, Dr Walton has presented at conferences and written articles on electronic trading, as well as providing independent consultancy in quantitative finance.

Dr Walton is also an Honorary Research Fellow at UCL, where he lectures in Financial Mathematics as part of the Masters programme in Financial Mathematics.



Practical application

What we teach is soundly based in current best practice. Our teachers have extensive practical experience in relevant capital markets.

Intellectual clarity

Our teachers are first class communicators and acknowledged experts in their fields. They combine extensive practical experience with profound theoretical understanding. As skilled communicators, they get the message across quickly and effectively. Course exercises deliver effective practical learning that participants remember long after leaving the classroom.

Personal approach

We try to understand the needs of each person and structure courses and packages of real benefit to them. All our teaching groups are small enough to enable individual needs to be assessed and met continually.

Economic value

We understand the commercial environment in which our clients operate. What we teach them delivers tangible benefits to their personal performance and to the bottom line of their companies.

Tight focus

Our expertise is in capital markets. That is what we concentrate on. We offer courses and packages on a wide range of topics in this important and complex area. This tight focus enables us to deliver teaching that is uniquely effective and useful.

Theory and practice

The professional and personal qualities of our course leaders are crucial: effective learning can only be delivered by exceptional teachers. At London Financial Studies we are able to attract prominent practitioners and academics all of whom have a clear and thorough grasp of their subjects and wide, practical experience.

They are all expert communicators with the ability to impart their knowledge in a clear and engaging way.

Accreditation

LFS is recognized by the CFA and GARP as providing executive education of the highest quality. Members are eligible for CE/CPD credits from this event.



Electronic Trading and Algorithmic Execution

Day 1

Electronic Markets

- Overview of e-trading in Equities and Fixed Income
- Exchanges, ECNs and Dark Pools
- Principal and agency trading
- The Limit Order Book

Order types

- A comparison of different order types:
- Market Orders and Limit Orders
- Immediate-Or-Cancel, Fill-Or-Kill, Iceberg Orders

Workshop: Comparing order types – spreads and slippage

Algorithmic Execution

- A look at various methods of algorithmic execution: VWAP, TWAP, Arrival price
- Volume prediction
- Slippage and Information leakage
- Market impact: temporary or permanent
- Transaction Cost Analysis
- Almgren-Chriss model for optimal execution

Workshop: Algorithmic execution in practice: how to calculate the real cost and achieve best execution

“

This is my 3rd course at LFS and again I have not been disappointed. The course as well as the organization were perfect.

”

Senior Software Engineer,
Commerzbank AG

Day 2

Electronic Market-Making

- Components of a market-making engine
- Price streaming and liquidity
- Pricing and hedging
- Measuring electronic risk exposure
- Grossman-Miller model for market-making

Signals

- A look at market microstructure
- Generating Trading Signals
- Order book imbalance
- Lead-lag, momentum, correlation

Workshop: How to build a trading signal

High Frequency Trading

- Definitions and examples of HFTs
- How to build a low-latency network

What Can Go Wrong and How to Avoid It

- Flash crashes
- The Swiss Franc collapse
- Knight Capital

Regulation for electronic trading

- Fair and Effective Markets Review
- Spoofing, layering
- FX last-look

Workshop: How regulation affects markets: last-look pricing

Application form: Electronic Trading and Algorithmic Execution

Location: London

The course fee is £2750 (£1375 per day) plus VAT* and includes full documentation, all relevant Excel macros and spreadsheets and access to our on-line Library. Lunch and refreshments are provided for delegates attending the course on-premises in London.

An early booking discount of 10% is available for full course registrations submitted more than one month before the start of the course. Further discounts are available for multiple applications.

Invoices will be sent out following the submission of the application form and are payable according to our general booking terms and conditions.

To apply for a place, please:

- Fill in 1 form for each delegate
- Write clearly in block capitals, print and sign
- Fax to +44 (0) 20 7378 1062
- Or email to info@londonfs.com

Applications are accepted subject to our General Booking Terms and Conditions available at <https://www.londonfs.com/booking/conditions>

A brief summary of our full terms and conditions is set out below.

Cancellations

An administration fee of 15% of the full brochure price will be charged for written cancellations received more than 20 working days prior to the start of the course. Delegates who request cancellation 20 working days or less before the course start date, or who do not attend, will be charged the full course fee. In the event of delegates not being able to attend, substitutes are welcome at any time for no extra charge.

Postponements

Delegates may make one postponement of a course place from the date of first enrolment to the next available course date free of charge provided that the postponement request is received more than 20 working days before the start of the course. All other postponements will be subject to a fee of 15% of the full brochure price.

*VAT & Course fees

For courses run in the United Kingdom, VAT at 20% will be charged where applicable according to UK law. Any currency conversion costs or other charges incurred in connection with the payment of fees are to be paid in addition to the fees. No deduction from fees for such costs or charges may be made.

Disclaimer

London Financial Studies reserves the right to cancel or postpone courses for reasons beyond its control. Under all circumstances the company's liability is limited to a full refund of the course fee paid.

Intellectual Property Notice

All intellectual property rights in material on any part of London Financial Studies (LFS) websites or in readings, slides, spreadsheets, live broadcast, video recordings or other material provided as part of a course or any other event run by LFS ("the Material") are owned either by LFS or by third parties. Where intellectual property rights are not owned by LFS the Material is reproduced under licence. Any further reproduction, editing, modification, adaptation or communication in any form or by any means of any of the Material is strictly prohibited.

LFS Live: Select to attend this course remotely (where available)

Course dates:

Title: Dr Mr Mrs Ms

Job title:

Phone:

Name:

Company:

Department:

Email:

Details of person to whom invoice should be sent:

Name:

Phone:

Email:

Job title:

VAT reg. number:

Payment type: Invoice Credit card

Address for invoice:

Booking code (if applicable):

Purchase order:

I have read and accept the booking terms and conditions at <https://www.londonfs.com/booking/conditions>

Signed:

Date: