Welcome talks

M.Sc Finance and Machine Learning

Finance and Machine Learning MSc

Academic staff:

- ↪ Hao Ma (Programme director)
- ↪ Alp Atakan (Head of School)
- ↪ Daniela Tavasci (Director of Student Experience PGT)
- ↪ Thomai Filippeli (Dissertation coordinator)

Support staff:

- ↪ James Kilvington (PGT Programme manager)
- ↪ Oliver Grabowski (PGT Programme manager)
- ↪ Kay Serroukh and Maha Anis (Student Support Officers)
- ↪ For all queries: `AskQM`

Finance and Machine Learning MSc

Three key pillars of this program:

- ↪ Intersection of Finance and Technology: Explore how machine learning techniques revolutionize financial analysis, risk management, and investment strategies.
- ↪ Hands-on learning: Engage in programming languages and real-world projects to apply machine learning algorithms for economic decision-making.
- ↪ Expert Faculty: Learn from renowned academics with practical experience in finance and machine learning.

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What will you learn?

- ↪ Understand the key concepts and principles of ML.
- ↪ Apply economic theory to the use of ML methods.
- ↪ Explore practical approaches to implement ML for the analysis of aggregate market trends and forecasting.
- ↪ Design and implement ML for investment decision making.
- ↪ Conduct critical studies on existing state-of-the-art ML.

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An interdisciplinary degree:

↪ Designed to appeal to students from an economics/finance or a quantitative (math/stats) background.

↪ Combined training on the central principles of financial markets with advanced machine learning methods and their applications across different contexts for the analysis of financial data.

↪ Delivered by the School of Economics and Finance (SEF).

↪ Additional elective modules offered by industry experts and the School of Mathematical Science.

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Program structure:

- Six compulsory/core modules:
  - ↪ Four in Semester A and two in Semester B.
- Three elective modules in Semester B.
- Semester C has two options:
  - ↪ Dissertation.
  - ↪ Two electives and one research project.

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Induction	Semester A	Semester B	Semester C
Math (ungraded)	Introduction to Machine Learning (15 credits)	Big Data Applications for Finance (15 credits)	Dissertation (45 credits)
Statistics (ungraded)	Corporate Finance (15 credits)	Large Language Models and Textual Analysis in Finance (15 credits)	Or
	Quantitative Methods (R) (15 credits)	Elective (15 credits)	Research Project (15 credits)
	Asset Pricing, Trading, and Portfolio Construction (30 credits)	Elective (15 credits)	Elective (15 credits)
			Elective (15 credits)

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Examples of Semester B electives:

- ECOM026 Financial Derivatives.
- ECOM194 Fintech.
- ECOM038 Behavioural Finance.
- ECOM044 Advanced Asset Pricing and Modelling.
- ECOM057 Asset Management.
- ECOM215 Blockchain Economics and Financial Market Innovation.
- ECOM074 Bond Market Strategies.
- ECOM035 International Finance.
- ... and many more

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SEF also offer a series of additional activities in Semesters A and B:

- ↪ AmplifyME Experience Finance.
- ↪ C++ for Finance.
- ↪ Financial Trading Programme.
- ↪ Matlab for Finance.
- ↪ Foundations of Technical Analysis.
- ↪ QNomics.
- ↪ Queen Mary University of London Investment Fund (QUMMIF).
- ↪ ... and many more.

QUMMIF

Queen Mary University of London Investment Fund (QUMMIF) for MSc students. A student-managed investment fund responsible for over £40k of investments.

QUMMIF is one of the only investment clubs in London, established for postgraduate students interested in obtaining relevant, practical work experience in trading and portfolio analysis. Membership is open to all the School of Economics and Finance postgraduate students.

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Survey results among Queen Mary University of London Investment Fund (QUMMIF) participants (as of 2024).

QNomics

QNomics is a free financial guidance centre for tech start-ups and entrepreneurs provided by students from the School of Economics and Finance, Queen Mary University of London.

The idea behind qNomics is to provide students with a simulated working environment where they can assist local businesses, start-ups, and entrepreneurs in understanding questions that pose hurdles for them in the initial stages of their business.

Student advisers undergo training programmes. Professionals deliver the training. The training covers, among other things, common financial issues for start-ups, presentation, and public speaking skills.

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Modules: Graded modules taught via a weekly lecture and the support class for 11 weeks.

Weekly lectures: For each lecture/week, the material (slides, readings, computer codes, additional recordings) will be made available on the SEF online learning platform (QMplus).

Classes/tutorials: You will be allocated to a weekly support class where you will have the opportunity to work through exercises with the Teaching Assistant.

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Dissertation: Students who pass all exams will progress to their dissertation during the summer. Details on the dissertation will be given at the beginning of Semester B. You are expected to attend meetings with your supervisor over the summer.

Deadline: Approximately August of each year.

Research project : If you prefer, you can instead do a research project and take two additional elective modules in Semester C. The projects will be similar to a dissertation but shorter (2,500 words), and this is reflected in the 15 credits.

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Semester A dates (see https://www.qmul.ac.uk/about/calendar/)

- ↪ Induction (2 weeks) from 15th Sep 2025 to 26th Sep 2025.
- ↪ Lecture starts on 29th September 2025.
- ↪ Module registration deadline: 9 October 2025.
- ↪ Careers week: 3rd-7th November (no teaching).
- ↪ Semester ends on 12th December 2025.
- ↪ Semester A exam period from 8th January 2026 to 23rd January 2026 (exact timetable will be released in November).

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Semester B dates (see https://www.qmul.ac.uk/about/calendar/)

- ↪ Lecture starts on 26th January 2026.
- ↪ Careers week: 9th -13th March 2026 (no teaching).
- ↪ Bank holidays: 3rd -06th April 2026 (no teaching).
- ↪ Semester ends on 17th April 2026.
- ↪ Semester B exam period from 7th May 2026 to 5th June 2026 (exact timetable will be released in March).

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Semester C dates (see https://www.qmul.ac.uk/about/calendar/)

↪ Lecture starts on 2nd June 2026.

↪ Semester ends on 1st August 2026.

↪ Semester C exam period from 17th August 2026 to 27th August 2026 (exact timetable will be released in July).

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Module registration:

↪ Go to: https://mysis.qmul.ac.uk.

↪ Log in using your username and password.

↪ Choose the modules (compulsory and electives) as listed before (see also the Student Handbook).

You need to make your choices soon, but there will be an opportunity to make changes to semester B modules, if needed, at the start of semester B.

Once you have entered it, we will check and confirm your selection.

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What we expect from you:

1. A strong commitment to learn.
2. Attendance to lectures and tutorials for which you are registered.
3. Full participation in lectures and tutorials.
4. Constructing evaluation and critical thinking.
5. Full respect of deadlines and duties.

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Useful links:

Postgraduate study:
https://www.qmul.ac.uk/sef/postgraduate/

Facilities:
https://www.qmul.ac.uk/sef/postgraduate/masters/facilities/

School news:
https://www.qmul.ac.uk/sef/news/