This MSc programme, which has been designed in conjunction with leading risk professionals, aims to meet the growing demand for professionals who are highly skilled in quantitative risk management. Students gain core competencies in risk analysis and have the opportunity to tailor the programme to their own interests and needs through the wide variety of options available.

Degree summary

Students will be educated to an advanced level in programming and computing and will gain mathematical, statistical and computational modelling skills. They will have a clear appreciation of different types of risk within the industry, and of the managerial and psychological issues related to risk control.

- The Bank of England (BoE), the Financial Conduct Authority (FCA) and the financial services industry place great emphasis on raising the level of quantitative analytics used in risk management and compliance. UCL, in collaboration with the BoE/FCA, aims to set a new benchmark in this area, based on training students to become risk professionals who are good scientists in the area of risk management.

- UCL Computer Science is recognised as a world leader in teaching and research. Our Master's programmes have some of the highest employment rates and starting salaries, with graduates entering a wide variety of industries.

- We take an experimental approach to our subject, enjoy the challenge and opportunity of entrepreneurial partnerships and place a high value on our extensive range of industrial collaborations.

The programme is delivered through a combination of lectures, seminars, tutorials and project work. Modules are assessed by written papers and/or coursework. The research project is assessed by a written report and (optional) oral examination.

Degree structure

Mode: Full-time: 1 year
Location: London, Bloomsbury

Students undertake modules to the value of 180 credits. The programme consists of four core modules (60 credits), four optional modules (60 credits) and a research dissertation (60 credits).

A Postgraduate Diploma will be offered to the students that have completed eight taught modules (120 UCL credits).

A Postgraduate Certificate will be offered to the students that have completed four taught modules (60 UCL credits).

Please note that the list of modules given here is indicative. This information is published a long time in advance of enrolment and module content and availability is subject to change.

COMPULSORY MODULES

- Financial Data and Statistics (15 credits)
- Financial Engineering (15 credits)
- Market Risk, Measures and Portfolio Theory (15 credits)
- Probability Theory and Stochastic Processes for Finance (15 credits)

OPTIONAL MODULES

Students choose 60 credits from the optional group.

- Algorithmic Trading (15 credits)
- Applied Computational Finance (15 credits)
- Financial Institutions and Markets (15 credits)
- Machine Learning with Applications in Finance (15 credits)
- Market Microstructure (15 credits)
- Networks and Systemic Risk (15 credits)
- Numerical Methods for Finance (15 credits)
- Operational Risk Measurement for Financial Institutions (15 credits)
- Quantitative Modelling of Operational Risk and Insurance Analytics (15 credits)

Please note: the availability and delivery of optional modules may vary, depending on your selection.

DISSERTATION/REPORT

Students undertake modelling, research and data analysis which takes place over the summer placement. This forms the basis of the 10,000-word dissertation.

Students can undertake a summer work placement in an industry environment organised by the department.
Your career

Many students have gone on to careers in financial services in the City of London or in their home countries; a number of graduates have proceeded to PhD-level study.

Employability

Students acquire mathematical, statistical and computational skills which are highly sought after by the financial industry to assess, quantify, model, simulate and edge risk.
Entry requirements

A minimum of an upper second class UK Bachelor's degree, in a relevant discipline, or an overseas qualification of an equivalent standard, with a strong quantitative component evidenced by good performance (higher than 60%) in relevant mathematics, statistics or computation options.

English language proficiency level

If your education has not been conducted in the English language, you will be expected to demonstrate evidence of an adequate level of English proficiency. The level of English language proficiency for this programme is: Good. Information about the evidence required, acceptable qualifications and test providers is provided at: www.ucl.ac.uk/graduate/english-requirements

Your application

Students are advised to apply as early as possible due to competition for places. Those applying for scholarship funding (particularly overseas applicants) should take note of application deadlines.

When we assess your application we would like to learn:

- why you want to study Financial Risk Management at graduate level
- why you want to study Financial Risk Management at UCL
- what particularly attracts you to this programme
- how your academic and professional background meets the demands of this programme
- what programming experience you have
- where you would like to go professionally with your degree

Together with essential academic requirements, the personal statement is your opportunity to illustrate whether your reasons for applying to this programme match what the programme will deliver.

There is an application processing fee for this programme of £75 for online applications and £100 for paper applications. Further information can be found at: www.ucl.ac.uk/prospective-students/graduate/taught/application.

FEES AND FUNDING 2019/20 ENTRY

// UK: £19,710 (FT)
// EU: £19,710 (FT)
// Overseas: £30,140 (FT)

The tuition fees shown are for the year indicated above. Fees for subsequent years may increase or otherwise vary. Further information on fee status, fee increases and the fee schedule can be viewed on the UCL Students website.

All full-time students are required to pay a fee deposit of £2,000 for this programme. All part-time students are required to pay a fee deposit of £1,000.

Four MSc Scholarships, worth £4000 each, are made available by the Department of Computer Science to UK/EU offer holders with a record of excellent academic achievement. The closing date is 30 June 2018. For more information, please see the department pages.

Full details of funding opportunities can be found on the UCL Scholarships website: www.ucl.ac.uk/scholarships

APPLICATION DEADLINE

All applicants: 14 June 2019

Details on how to apply are available on the website at: www.ucl.ac.uk/graduate/apply

CONTACT

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EU referendum

For up-to-date information relating to specific key questions following the UK’s decision to leave the EU, please refer to www.ucl.ac.uk/brexit