

QUANTITATIVE FINANCE (MSC)

ENTRANCE REQUIREMENTS

Normally a 2.1 Honours degree or equivalent qualification acceptable to the University in Finance, Mathematics, Economics or other relevant quantitative subject. Science and Engineering disciplines will be considered where there is a significant mathematical component. Applicants with a high 2.2 Honours degree or equivalent qualification acceptable to the University and sufficient relevant experience will be considered on a case-by-case basis.

INTERNATIONAL QUALIFICATIONS

For information on international qualification equivalents, please see: go.qub.ac.uk/YourCountry

ADDITIONAL INFORMATION FOR INTERNATIONAL STUDENTS

International students wishing to apply to Queen's University Belfast (and for whom English is not their first language), must be able to demonstrate their proficiency in English in order to benefit fully from their course of study or research. Non-EEA nationals must also satisfy UK Visas and Immigration (UKVI) immigration requirements for English language for visa purposes.

Evidence of an IELTS* score of 6.5, with not less than 5.5 in any component, or an equivalent qualification acceptable to the University is required.

*Taken within the last 2 years.

For more information on English language requirements for EEA and non-EEA nationals see: go.qub.ac.uk/EnglishLanguageReqs

If you need to improve your English language skills before your study, our partner INTO Queen's University Belfast offers a range of English language courses: www.intohigher.com/qub

FEES AND FUNDING

Northern Ireland (NI): £6,900
England, Scotland or Wales (GB): £6,900
Other (Non-UK/EU): £6,900
International: £19,900

For fees and funding information please see:
Fees: qub.ac.uk/TuitionFees
Funding: go.qub.ac.uk/qubpgfunding

PLACES

24

DURATION

1 year full-time

OVERVIEW

Why is this subject for you?

- You have an interest in quantitative finance.
- You want a career in areas such as trading, quantitative portfolio management, data analytics, risk management and academia.
- You want to learn through doing.

Studying quantitative finance looks at how mathematical, programming and statistical tools are used in the real-world for the analysis and modelling of financial data.

The programme will equip students with the cutting-edge quantitative and computational techniques and strategies utilised by leading financial firms and will prepare students for future careers in a quantitative finance, trading or more general finance environment. The course aims to bridge the gap between quantitative models and financial decision-making.

CONTENT

Semester 1 (CATS)

- **Asset Pricing (15)** *Explore a modern investors perspective where markets are dynamic and biases are prevalent.*
- **Corporate Finance (15)** *Topics include Appraisal, Corporate Governance, Merger and Acquisition.* or **Market Microstructure (15)** *Understand key participants, structures and trading processes that underpin capital markets.*
- **Data Management (15)** *Identify and extract data, preprocessing, data quality, data warehousing, relational databases and big data solutions.*
- **Research Methods in Finance (15)** *Introduces the applied econometric technique for contemporary financial data problems via the R programming language.*

Semester 2 (CATS)

- **Computational Methods in Finance (15)** *Combine Maths, Finance and Computing to understand key quantitative finance problems using Python.*
- **Advanced Analytics and Machine Learning (15)** *Understand the application of machine learning algorithms.*
- **Time-Series Financial Econometrics (15)** *Conceptual understanding of statistical modeling of financial data dynamics using R programming.*
- **Trading Principles (15)** *Explore key finance concepts via real decision making using trading simulations.*



Semester 3

- Academic Dissertation (60 CAT points) or
- Applied Research Project (60 CAT points)

Modules are subject to change.

ASSESSMENT

End of semester exams, class tests, individual and group projects, oral presentations and case study investigations.

CAREERS

Quantitative Finance graduates have gone into a range of roles, including;

- Trade Analyst in a global brokerage firm
- Financial Software Developer
- Operations Analyst in a global bank
- Portfolio Analyst in a private wealth management company
- Energy Trader in an independent energy group
- Quant Equity Analyst in Merrill Lynch

WHY QUEEN'S?

Trading Room

The Trading Room is utilised in many modules and extra-curricular activities. Many classes are held in the Trading Room. Students have access to Bloomberg software, a market leader in financial news, data and analytics, which is used by many financial institutions. The Trading Room allows for an interactive and exciting learning environment which brings textbook theory to life.

“The Master’s provided me with unique access to the Trading Room, an excellent facility that was essential to my learning experience. Between learning how to use industry leading software like Bloomberg to being introduced to coding software, this room bridged the gap between academic learning and practical application, an experience that I will take with me into the world of employment.”

David McClean,
MSc Computational Finance and Trading
(now Quantitative Finance)

Accreditation

The programme has been accepted into the CFA Institute University Recognition Program. It aligns with the Candidate Body of Knowledge (CBOK) – the core knowledge, skills, and abilities that are generally accepted and applied by investment professionals throughout the world.

Student Managed Fund (SMF)

Quantitative Finance students are encouraged to join the Student Managed Fund to supercharge their future employability by having some real money investment experience. Queen's Management School is one of only a handful of universities in the UK and Ireland to offer this experience which is a game changer when it comes to graduate employability. Students manage a real money investment portfolio of £30,000.

Queen's Management School is committed to the continuous improvement and enhancement of all of its degree programmes. New modules may be developed and included to replace or enhance those which are mentioned here.

APPLY NOW

go.qub.ac.uk/pgapply

CONTACT

Dr Barry Quinn
Programme Director
Queen's Management School
t: +44 (0)28 9097 5514
e: qms@qub.ac.uk
qub.ac.uk/qms