Mathematical Sciences

NSS 2018
93% OVERALL SATISFACTION IN MATHEMATICS AND STATISTICS

AWARD-WINNING MATHEMATICS LEARNING SUPPORT CENTRE

THE TIMES AND SUNDAY TIMES GOOD UNIVERSITY GUIDE 2019
11TH FOR MATHEMATICS
Why study Mathematical Sciences?

Mathematics is a thrilling and stimulating subject which is not only fascinating to study in its own right but also underpins a great variety of endeavours such as science, commerce and industry.

It has a natural elegance and splendour, taking real world problems and creating mathematical models to aid understanding.

A mathematics degree is actively sought by employers and opens many doors to subsequent employment and further study. This is partly because of its vast scope and array of applications, and partly because its study equips students with the numerical abilities, logical thinking and analytical skills that are crucial to the success of diverse organisations within commerce, banking and finance, management and industry. Through innovative teaching we will equip our students with these skills while also opening up the many facets of this rich and stimulating discipline.

Active in high-quality research across the broad spectrum of mathematics, the Department has an international reputation and has attracted staff and students from all over the world, making it a diverse and stimulating environment in which to study.
The Department of Mathematical Sciences is located in the Schofield Building, which is based centrally on the University campus. The building has recently undergone a £4.5 million refurbishment to equip it with dedicated resources for mathematics students.

As a student within the Department of Mathematical Sciences, you will benefit from 24/7 access to state-of-the-art computer labs in the Schofield Building and also from our co-location with the Mathematics Learning Support Centre.

The Mathematics Learning Support Centre provides a range of services designed to support any student at Loughborough University in their learning of mathematics or statistics. In particular, it aims to help students in the earlier stages of their studies, who might benefit from resources and tuition over and above what is normally provided as part of their programme. In addition to a wide variety of printed and online resources, a member of academic staff is available within the centre for four hours each day to provide one-to-one help.

The wide-reaching reputation of Loughborough University’s Department of Mathematical Sciences attracts international visitors, and both staff and students benefit from a comprehensive series of seminars, guest speakers and public lectures.

Women in Mathematics
Loughborough University holds the Athena SWAN Bronze Award, recognising its commitment to improving the representation and career progression of women in STEM (science, technology, engineering and mathematics) subjects.

The Department of Mathematical Sciences is committed to creating a diverse and inclusive culture in which students are able to thrive, regardless of their gender. As a Loughborough University mathematics student, you will be invited to attend the Claudia Parsons lecture – our annual celebration of women in STEM.

You will be encouraged to take part in outreach activities and work as an ambassador at open days, inspiring prospective students just like you.

The Department is a supporter of the London Mathematical Society Good Practice Scheme to embed equal opportunities for women within its working practices.

For more information about the Mathematics Learning Support Centre: www.lboro.ac.uk/mlsc
Our courses

All our courses give students a solid grounding in the fundamentals of mathematics and allow them to specialise in a number of areas including statistics and mathematics education.

Our courses in accounting and finance, economics and management are co-taught by the School of Business and Economics – one of the UK’s leading business schools. Our Mathematics and Sport Science course is co-taught by Loughborough’s renowned School of Sport, Exercise and Health Sciences which has been named first in the world for the study of sports-related subjects for two years running by QS World University Rankings.

Financial Mathematics
Mathematics and Accounting and Financial Management
Mathematics and Sport Science
Mathematics
Mathematics with Economics
Mathematics with Statistics
Mathematics with a Foundation Year

BSc or MMath?
Our BSc courses will equip you with the numerical abilities, logical thinking and analytical skills required to work in a diverse range of roles within a diverse range of organisations. If you have a desire to work as a professional mathematician in industry, commerce, or higher education, or pursue a research career, the MMath course will provide you with the more advanced level of study needed to work towards your aims.

Financial Mathematics

This course is evenly divided between the two main subject areas. It draws upon the expertise of both the Department of Mathematical Sciences and the University’s School of Business and Economics to provide insights into mathematics, accounting and financial management in the ‘real world’ context of business and commerce.

Designed for those who wish to gain knowledge of corporate finance, accounting and financial management as well as the powerful mathematical tools used in the financial and business sectors, the problem-solving skills and accounting skills acquired make graduates highly attractive to a wide range of employers.

Accreditation has been obtained for this course from the professional institutes in accountancy.

Mathematics and Sport Science

This joint honours course is an opportunity to combine the study of mathematics with the study of sport science at one of the UK’s leading universities for sport science.

Sport science modules will be taught by world-leading experts from within the School of Sport, Exercise and Health Sciences - ranked first in the world for sport-related subjects in the QS World University Rankings by Subject 2017 and 2018.

Loughborough’s School of Sport, Exercise and Health Sciences boasts extensive laboratories allowing the very best learning experience for our students. Not only that, but you’ll have access to the excellent facilities on campus, including our unrivalled sports facilities.

The combined study of mathematics and sport science is one that reflects particular strengths of Loughborough University and is not available at many other institutions.

Mathematics and Accounting and Financial Management

This three-year course focuses on the fundamentals of mathematics and their applications in the fields of business and finance.

Entry Requirements:
A level: AAA including Mathematics
IB: 37 (6,6,6 HL) including HL Mathematics
BTEC Level 3 Diploma: 12 units at Distinction plus A level Mathematics Grade A, or 6 units at Distinction plus AA in two A levels including Mathematics

Entry Requirements:
A level: AAA including Mathematics
IB: 37 (6,6,6 HL) including HL Mathematics
BTEC Level 3 Diploma: 12 units at Distinction plus A level Mathematics Grade A, or 6 units at Distinction plus AA in two A levels including Mathematics

*DPS/DIntS: Diploma in Professional Studies/Diploma in International Studies.

www.lboro.ac.uk/maths
**Mathematics**

**MMath (Hons) 4 years full-time**
UCAS code: G102

**Math (Hons) DPS/DIntS* 5 years full-time sandwich**
UCAS code: G104

**BSc (Hons) 3 years full-time**
UCAS code: G100

**BSc (Hons) DPS/DIntS* 4 years full-time sandwich**
UCAS code: G107

**Entry Requirements**

**A levels:** AAA including Mathematics

**IB:** 37 (6, 6, 6 HL) including HL Mathematics

**BTEC Level 3 Diploma:** 12 units at Distinction plus A level Mathematics Grade A, or 6 units at Distinction plus AA in two A levels including Mathematics

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**Mathematics with Statistics**

**BSc (Hons) 3 years full-time**
UCAS code: G013

**BSc (Hons) DPS/DIntS* 4 years full-time sandwich**
UCAS code: G010

**Entry Requirements**

**A levels:** AAA including Mathematics

**IB:** 37 (6, 6, 6 HL) including HL Mathematics

**BTEC Level 3 Diploma:** 12 units at Distinction plus A level Mathematics Grade A, or 6 units at Distinction plus AA in two A levels including Mathematics

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Our Mathematics course provides a balanced study of the most important aspects of maths so that you can achieve a thorough understanding of the fundamentals to help prepare you for a successful career.

A mathematics degree is actively sought by employers and opens many doors to subsequent employment and further study. This is partly because of its vast scope and array of applications, and partly because it has arrived as an integral part of the success of organisations within commerce, banking and finance, management and industry.

The course enables you to study the broad scope of mathematics, guided by the expertise of our respected academic staff, and to tailor your degree to suit your interests and aspirations through wide-ranging optional modules.

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Economics relates to every aspect of our lives, from the decisions we make as individuals to the policies adopted by governments and the products and services offered by companies. Economics will give you new perspectives on some of the most pressing and challenging problems and choices facing the world today. This course enables you to combine the study of economics with mathematics, equipping you with excellent tools to not only understand global challenges, but also to provide solutions.

The course provides a solid grounding in mathematics together with an understanding of economics sufficient to prepare graduates for careers in areas such as actuarial work, business forecasting and economic model building. No previous knowledge of economics is necessary as the first two years provide a comprehensive introduction to theory and policy in both macroeconomics and microeconomics.

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**Mathematics with a Foundation Year**

**UCAS Code:** G102

Mathematics with a Foundation Year is for candidates who for some reason have not had the opportunity to study the pre-requisite subjects needed for first year entry. Offers will not normally be made to those who apply simply because their A level grades/predictions are below the requirements for direct entry.

Successful completion of the one year Foundation course allows you to progress onto any of the courses in our Department.

For further details and entry requirements, please visit: [www.lboro.ac.uk/foundation](http://www.lboro.ac.uk/foundation)
Placements and careers

As a department we have a strong tradition for working with industry. The partnerships we build with external organisations strengthen the relevance of our teaching and our research. They also provide the opportunity for students to secure placements and graduate employment.

Outstanding placement opportunities
All our courses offer a year-long placement (sandwich) option, giving you the opportunity to spend a year building experience within an industrial, commercial or research establishment. The Mathematics department has established good relationships with a variety of companies.

Examples of recent placement destinations include:
• Department of Health
• Morgan Stanley
• Total Gas & Power
• Johnson & Johnson
• Samsung Electronics UK
• Goldman Sachs International
• IBM
• LHR Airports Ltd
• University of Technology Sydney
• Ernst & Young
• Mercedes AMG High Performance
• Virgin Media Ltd
• Hilton
• Jaguar Landrover

Excellent career prospects

A degree in mathematics opens the door to a wide variety of careers, particularly roles in which analytical skills, logic, reasoning, problem-solving and high levels of numeracy are prized.

Here are just some of the exciting careers that graduates have gone on to pursue:
• Analyst Consultant, Atos
• Technology Risk Consultant, KPMG
• Exposure Analyst, Lancashire Insurance Group
• International Graduate, Standard Chartered Bank
• Global Graduate Leader, Aviva
• KYC Analyst, Barclays (Switzerland)
• Quantity Surveyor, Norman Rourke Pryme
• Officer Cadet, British Army
• Forensic Financial Investigator, Mazars
• Data Analyst, IBM
• Production Manager, Serious Stages Ltd

“I have most enjoyed studying what I love. The course has allowed me to expand my knowledge of a subject which I am passionate about, and has made me really excited to finish my degree and use this knowledge.”

— Jill
BSc Financial Mathematics
This brochure was written several months in advance of the academic year to which it applies (2020). Every effort has been made to ensure that the information contained within is accurate at the time of publishing, but updates (for example to course content) are likely to occur due to the time between publication and the course start date. It is therefore important to visit our online prospectus at www.lboro.ac.uk/study before applying to check for any updates, as this will be the most up-to-date repository of information.

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