Mathematical Sciences

NSS 2017
RANKED TOP 10 IN THE UK FOR OVERALL SATISFACTION IN MATHEMATICS AND STATISTICS

AWARD-WINNING MATHEMATICS LEARNING SUPPORT CENTRE

DLHE 2015/16
93% IN GRADUATE-LEVEL EMPLOYMENT (OF THOSE IN FULL-TIME EMPLOYMENT AFTER 6 MONTHS OF GRADUATION)
Why 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 the proud holder of the Athena SWAN silver award in recognition of its commitment to gender equality and its work to advance the representation of women in STEM subjects.
An excellent learning environment

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.

Your Mathematical Sciences department

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

The Department of Mathematical Sciences and the Mathematics Education Centre hold the prestigious Athena SWAN Silver award, recognising their commitment to improving the representation and career progression of women in STEM (science, technology, engineering and mathematics) subjects. As Loughborough University Mathematics student you will be invited to attend the Claudia Parsons lecture - our annual celebration of women in STEM. You will benefit from the support of our peer mentoring scheme and have the opportunity to attend Women in Mathematics events all over the country.

You will also be encouraged to take part in outreach activities and work as an ambassador at open days (for example, at our Women in Science drop-in sessions), inspiring prospective students just like you.

“...I was attracted to the University for the support it provides to students, including the Mathematics Learning Support Centre, which I have found really helpful during my time here.”

— Heena Patel
MMath Mathematics

For out more 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 – recently ranked joint-first in the world for sport-related study by QS World University Rankings.

Mathematics
- Financial Mathematics
- Mathematics and Accounting and Financial Management
- Mathematics and Management
- Mathematics and Sport Science
- Mathematics with Economics
- Mathematics with Mathematics Education
- 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.

Mathematics
- MMath (Hons) 4 years full-time
  UCAS code: G103
- MMath (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: G101

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

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

Financial Mathematics
- BSc (Hons) 3 years full-time
  UCAS code: G1N3
- BSc (Hons) DPS/DIntS* 4 years full-time sandwich
  UCAS code: G1N3

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

This course is designed to meet the growing demand within the financial services industry for graduates with understanding of both finance and its underpinning mathematics. Mathematics accounts for two-thirds of the course, but no previous knowledge of economics is necessary as the first two years provide a comprehensive introduction.

Mathematics and Accounting
- BSc (Hons) 3 years full-time
  UCAS code: G1N4
- BSc (Hons) DPS/DIntS* 4 years full-time sandwich
  UCAS code: G1NK

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

Accreditation has been received for this course from several of the professional institutes in accountancy. It will suit 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 sector.

Mathematics and Management
- BSc (Hons) 3 years full-time
  UCAS code: G1N2
- BSc (Hons) DPS/DIntS* 4 years full-time sandwich
  UCAS code: G1NF

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

This course combines the broad study of mathematics with business and management studies, giving graduates highly prized skills in strategic management, marketing, human resources management and company finance.
Mathematics and Sport Science

BSc (Hons) 3 years full-time
UCAS code: G061
BSc (Hons) DPS/DIntS* 4 years full-time sandwich
UCAS code: GT16

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

Run in collaboration with the renowned School of Sport, Exercise and Health Sciences, this course is ideal for those who wish to combine the study of the two disciplines – a combination that reflects particular strengths of Loughborough and is not available at many other institutions. The option choices allow for specialisation in a wide variety of directions, while still covering the core areas of mathematics and sport science.

Mathematics with Mathematics Education

BSc (Hons) 3 years full-time
UCAS code: G013
BSc (Hons) DPS/DIntS* 4 years full-time sandwich
UCAS code: GT10H

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

An ideal preparation for students considering teaching careers, this distinctive course reflects Loughborough University’s research prowess in the field of mathematics education, and combines an in-depth study of mathematics with modules that introduce the study of how Mathematics is both taught and understood. We offer the possibility to progress from this course to a PGCE in Mathematics at Loughborough.

Mathematics with Economics

BSc (Hons) 3 years full-time
UCAS code: G1L1
BSc (Hons) DPS/DIntS* 4 years full-time sandwich
UCAS code: G1LC

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

This course provides a solid grounding in mathematics together with an understanding of economics that prepares graduates for careers in areas such as actuarial work, business forecasting and economic model building. The first two years provide a comprehensive introduction to theory and policy in both macroeconomics and microeconomics.

Mathematics with Statistics

BSc (Hons) 3 years full-time
UCAS code: GG13
BSc (Hons) DPS/DIntS* 4 years full-time sandwich
UCAS code: GG1H

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

This course is distinctive in offering a substantial statistics and probability component in addition to training in the fundamentals of applied and theoretical mathematics. Students on the course will learn the statistic programming language, R, and have the opportunity to undertake a final year project.

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
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 are 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 Onamusi
BSc Financial Mathematics
General enquiries
Department of Mathematical Sciences
Loughborough University
Leicestershire LE11 3TU UK
T: +44 (0)1509 222861
E: maths@lboro.ac.uk