MANCHESTER 1824

The University of Manchester

Mathematics

UNDERGRADUATE BROCHURE

For more than a century, Manchester has been at the forefront of mathematics. Today we continue the great work of the past, and of the many famous mathematicians who have made Manchester their home, from Alan Turing to Sir Horace Lamb.

With over 80 mathematicians working in Applied, Pure, Statistics, Probability, and Financial Maths, we offer a wide range of options in our degree programmes. This allows our students to find out what interests them most and to specialise as much as they wish.

Based in the modern, purpose-built Alan Turing building at the centre of campus, our students have access to world class facilities and a large community of supportive staff and students.

Why Manchester

We're ranked in the top ten UK universities for mathematics (QS World University Rankings, 2022).

Join a close-knit maths community and learn in a friendly, sociable environment with a focus on small-group teaching.

Utilise our £43 million purpose-built Alan Turing Building, designed with input from maths academics and students for an optimal learning environment.

Study at one of the most respected departments of mathematics in the country, with a rich heritage and a clear focus on the future. We've been home to some of the biggest names in the subject, including Alan Turing and Sydney Goldstein.

Read more about why Manchester should be your first choice: uom.link/ug-maths-why-mcr

Our courses

We offer two types of degrees: Single Honours and Joint Honours. Single Honours courses are constructed around a mathematics core, providing fundamental knowledge and forming the basis for more advanced work in later years. Joint Honours degrees combine mathematics with another main subject, allowing you to pursue that subject to the same level as mathematics.

Mathematics BSc
Mathematics MMath
Mathematics and Statistics BSc
Mathematics and Statistics MMath
Mathematics with Financial Mathematics BSc
Mathematics with Financial Mathematics MMath
Mathematics with Placement Year BSc
Mathematics with an Integrated Foundation Year
Actuarial Science and Mathematics BSc
Mathematics and Philosophy BSc
Mathematics with Finance BSc

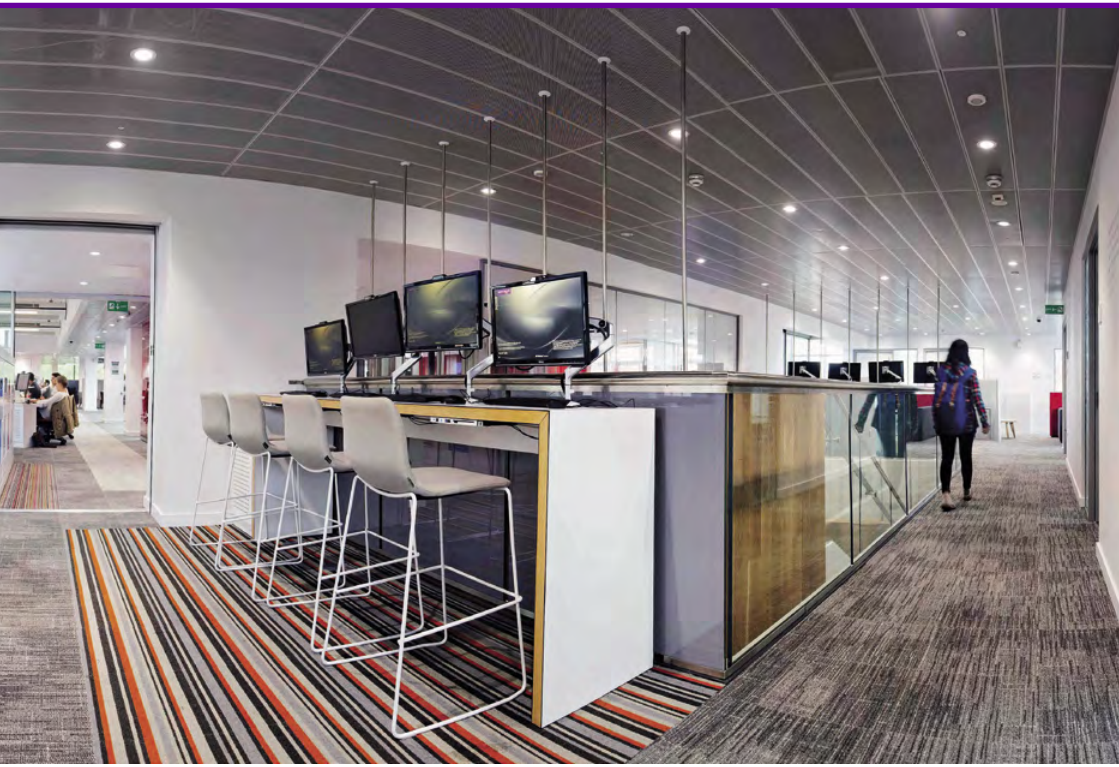
FLEXIBLE OPTIONS

Our degree programmes offer the widest choice of options - ideal if you are mathematically gifted and wish to keep your options open. You can choose courses from other disciplines and from a range of maths course units.

FOUNDATION YEAR AVAILABLE

You can prepare for the full degree course if you do not have the appropriate qualifications for direct entry by undertaking our foundation course first.

Find out more about the different courses and options on offer on our department website: uom.link/ug-maths



What you'll learn

You'll gain good all-round mathematical knowledge and skills, together with the ability to explore more specialised results, methods, and ideas. You'll develop your capacity to learn and apply mathematical ideas, to understand the significance and power of mathematics, and to acquire a thorough knowledge and understanding of the topics.

SINGLE HONOURS

In the first year you'll study pure, applied, statistics, and probability, giving you a solid foundation for making decisions on what you wish to study in later years.

In your second and third years you can choose to specialise more within one of these areas or continue with a wide variety of maths. You can choose to do a project, learn programming or even take a module from another department.

JOINT HONOURS

'Mathematics and X' courses are 50% maths; 'Mathematics with X' courses are two-thirds maths.

In the first year you'll study a similar core of pure and applied maths, statistics and probability. In further years you'll enjoy some flexibility to specialise with optional course units.

Special features

INDUSTRIAL EXPERIENCE

If you want to take advantage of a year-long placement but aren't already enrolled on a "with placement" programme, you can choose to switch to one after you secure your placement. This allows you to keep your options open when studying at Manchester. Choosing to take a placement will give you the opportunity to gain invaluable work-based experience and learn more about yourself and the workplace so that you're better equipped to make the best choices about a career post-graduation. Many students who have a year placement are taken on by the same employer once they have finished their studies. The timing of the placement will depend on whether you're studying a three or four-year degree course.

Read more about your options:
uom.link/ug-maths-ind-exp

FACILITIES

Our facilities include collaborative working labs, complete with specialist computing and audio-visual equipment to support group working. We also offer a wide variety of software for use by students, including office software, specialist mathematical and scientific software, and open source applications. You can learn MATLAB, LaTeX, R, Python and C++, depending on which course units you choose.

Find out more about our facilities and what's available for students: **uom.link/ug-maths-facilities**

OUR STUDENT COMMUNITY

You can boost your career prospects and enhance your student experience through any of the different extracurricular opportunities available at the University, including societies (MathSoc, The Actuarial Society), volunteering and work placements. The Manchester Leadership Programme allows you to develop the skills that graduate employers seek while also giving back to the community.

Visit **uom.link/ug-maths-student-union** and **uom.link/ug-maths-mlp** for more details

Open days

The University holds undergraduate open days regularly where you have the opportunity to find out more about our courses, the support we offer and see our facilities. Attending an open day is a great way to find out what studying at Manchester is like and to hear from our staff and students.

For information about our open days visit:
uom.link/ug-maths-open-days

"Lecturers here are so willing to help. In an actuarial science careers workshop I attended, the lecturer said if I ever get an interview to drop him an email and he'll help me through planning for it."

Hana Palfry / BSc Mathematics

Watch Hana and Scarlett talk about their experience of the first year of their degree course: **uom.link/ug-maths-video**

CLOSE COMMUNITY AND SMALL-GROUP TEACHING

Working in the Alan Turing Building fosters a real sense of community, as does our focus on small-group teaching - especially in first year.

"After completing fundamental modules, you get a feel for the type of maths you enjoy and can focus on that area. The ability to do practical courses such as maths in education, applying and teaching maths in real situations as well as programming (learning R and Python) were big positives for me."

Hannah Levell
BSc Mathematics with Financial Mathematics alumni
Trainee accountant, PwC

Read more about Hannah's time at Manchester: **uom.link/ug-maths-hannah**

Employability and careers

Studying mathematics develops skills and knowledge which are highly valued in a wide variety of professions. Proving your ability to think clearly and logically, a mathematics degree prepares you for virtually any area of employment.

Mathematicians are therefore in high demand across a range of sectors. Our graduates land roles in every imaginable industry, from fashion and pharmaceuticals to industry and investment banking.

WHAT OUR GRADUATES DO

- Data Scientist
- Hardware Engineer
- Investment Analyst
- Actuarial Analyst
- Statistician
- Programmer
- Teaching

The University of Manchester is the most targeted universities in the UK by employers (The Graduate Market in 2022). uom.link/ug-maths-highfliers

WHERE OUR GRADUATES WORK

- Aardvark
- Swift
- BP
- Credit Suisse
- Royal London
- Prospects
- KPMG
- PwC

CAREERS AND EMPLOYABILITY

Every year we run a maths-specific careers fair open to all maths students. It is attended by a large number of employers from a wide variety of industries, and previous attendees include: Amazon, Amec, Barclays, BP, Deloitte, HMRC, IBM, the Institute and Faculty of Actuaries, Jaguar Land Rover and PwC.

Find out about the careers opportunities the University and our department offer, so that you graduate with a range of skills and experience: uom.link/ug-maths-careers

Department of Mathematics
The University of Manchester
Oxford Rd
Manchester
M13 9PL
United Kingdom

t +44 (0)161 543 4019

e ug-maths@manchester.ac.uk

w manchester.ac.uk/maths

@ManUniMaths

@manunimaths

uom.link/ug-maths-blog

DISCLAIMER

This brochure was produced in 2022. It has therefore been produced in advance of course starting dates. For this reason, course information, including course content, may be amended prior to your applying for a place on a course of study. There are a number of reasons why changes to course information and/or published term dates may need to be made prior to your applying for a place on a course. These may include, but are not limited to: the need to make reasonable changes to the content and teaching offered in relation to any course for operational and/or academic reasons; the withdrawal of courses due to insufficient numbers; a course not receiving the required accreditation; and/or interruption or loss of key services due to circumstances beyond our control, including fire, flood or other operational issues.

Prospective students are therefore reminded that they are responsible for ensuring, prior to applying to study at The University of Manchester, that they review up-to-date information by searching for the relevant course at uom.link/fse-ug-courses

INDUSTRIAL EXPERIENCE DISCLAIMER

Some aspects of the industrial experience programmes may continue to be impacted by the COVID-19 pandemic. The situation is fast-moving and dynamic and may require adjustments at short notice.