Mathematics
The facts

- State-of-the-art facilities in a purpose-built £60m building
- Rated “excellent” for teaching quality in mathematics in the last national assessment
- Most targeted UK university by top graduate employers
- Large range of lecture courses, informed by cutting-edge mathematics research
- 4 million books in one of the UK’s best university libraries
Introducing Manchester Mathematics

Course details
Student profiles
Graduate profiles
Funding
Careers
Find out more online

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The staff are friendly and approachable... their passion for the subject makes the lectures engaging and interesting

Una Gardiner
MMath Mathematics

“
Our city
Always moving forward

Manchester lives on the edge of tomorrow, ever a step ahead in science, industry, media, sport and the arts. The Mancunian character—exemplified by the city’s central role in the industrial revolution—strives for excellence and originality in all walks of life.

This is a city of many accents, having become a cosmopolitan magnet for students and professionals eager to experience its can-do attitude, independent spirit and cultural wealth.

Never content to live on past glories, Manchester has a passion for progress. Join us at the heart of Britain’s most popular student city.

Discover what makes Manchester unique: www.manchester.ac.uk/cityofmanchester
Your experience
More than just a degree

With resources from the hi-tech 24/7 learning environment of our Alan Gilbert Learning Commons, to the countless personal development opportunities and specialist support services we offer, we will empower you to be your best.

Outstanding sport facilities, nearly 300 student societies, supported community volunteering, study abroad pathways, career development programmes, mentoring and much more all enable you to grow and develop outside of the lecture hall, giving you a well-rounded university experience that prepares you for life after graduation.

The only thing you won’t experience is boredom.

Hear from some of our students: www.manchester.ac.uk/ug/profiles

Your career
On a course to success

We are consistently one of the UK’s most targeted universities by employers, thanks to courses and careers services designed with your employability in mind.

Our problem-based approach to learning inspires you to think critically, creatively and independently. Volunteering, personal development programmes and interdisciplinary learning could also give you a broader perspective and shape the socially responsible leaders of tomorrow.

We have the UK’s best careers service, providing a wealth of advice and skills-development opportunities, and connecting you with employers to put you on a path to career success.

Take control of your career: www.manchester.ac.uk/careers
An outstanding reputation

From its inception, our School has always been well known for the quality of our teaching and degree programmes. Excellent resources enable us to offer considerable small-group teaching in your first year while you adjust to university life, with its more independent style of learning. In addition, the number and quality of academic staff in our School mean that you have a huge range of options in your third and fourth years, giving you the freedom to specialise in whatever area of mathematics you wish.

What will you gain from Manchester?

Our aim is to provide a wide variety of high-quality degree programmes for students of good mathematical ability. On completion of your degree, you will have a knowledge of such basic ideas as rigorous argument, formal proof and the power of abstract formulation of problems, together with deeper ideas in those areas of mathematics in which you have decided to specialise. You will also have been introduced to applications of mathematics, computing skills and the use of IT resources, and you will have developed your ability to work independently.

We are also in the unique position of having arranged membership of the Institute of Mathematics and its applications for all our School’s undergraduates, so you will have all the benefits of membership throughout your time as a student.

Why Manchester?

- One of the largest, most respected schools of mathematics in Britain
- A new building, purpose-built and incorporating excellent facilities
- A portfolio of high-quality flexible Single Honours and Joint Honours degrees, with a large range of lecture course options
- Strong traditions of good relations between staff and students, and a high standard of pastoral care
Course details
Our undergraduate degrees

We offer a wide variety of full-time undergraduate degree programmes. These are divided into two groups: Single Honours Mathematics degrees and Joint Honours Mathematics degrees.

This admissions brochure describes the degree programmes, entry requirements, scholarships and other details for students starting in September 2014. The information given here is correct to the best of our knowledge, but please note that some changes might take place before you start with us, in particular to the lists of course unit options available. Should you wish to defer your entry, you should consult the brochure for the appropriate year, when it becomes available.

Single Honours degrees

These degrees are constructed around a core of basic mathematics that provides fundamental mathematical knowledge and skills, and forms the basis for more advanced work in later years.

<table>
<thead>
<tr>
<th>Single Honours degrees</th>
<th>Duration</th>
<th>UCAS Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>3 years</td>
<td>G100</td>
</tr>
<tr>
<td>Mathematics and Statistics</td>
<td>3 years</td>
<td>GGC3</td>
</tr>
<tr>
<td>Mathematics with Financial Mathematics</td>
<td>3 years</td>
<td>G1NH</td>
</tr>
<tr>
<td>MMath</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>4 years</td>
<td>G104</td>
</tr>
<tr>
<td>Mathematics and Statistics</td>
<td>4 years</td>
<td>GG13</td>
</tr>
<tr>
<td>Mathematics with Financial Mathematics</td>
<td>4 years</td>
<td>G1NJ</td>
</tr>
</tbody>
</table>

The traditional three-year BSc (Hons) Mathematics degree (G100) is very flexible and is an excellent programme for students who wish to maintain the widest choice of career options in mathematics. MMath stands for the Master of Mathematics degree. This four-year MMath degree (G104) is also flexible, and provides in addition the experience of working to a higher level in selected areas of mathematics.
Mathematics

Joint Honours degrees

These degrees combine mathematics with another main subject. One of these may be your best choice if you are good at mathematics and wish to pursue another subject to the same level, either for career reasons, or for personal development. You should note, however, that in combined degrees there is less scope for taking course units from outside the two main subjects.

These joint degrees come in two combinations:
‘and’ degrees, which normally combine the two subjects on a 50-50 basis;
‘with’ degrees, which are normally two-thirds mathematics and one-third of something else.

<table>
<thead>
<tr>
<th>Joint Honours degrees</th>
<th>Duration UCAS</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BSc</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics with Finance</td>
<td>3 years</td>
<td>G1N3</td>
</tr>
<tr>
<td>Mathematics with Business and Management</td>
<td>3 years</td>
<td>G1N2</td>
</tr>
<tr>
<td>Actuarial Science and Mathematics</td>
<td>3 years</td>
<td>NG31</td>
</tr>
<tr>
<td>Mathematics with a Modern Language</td>
<td>4 years</td>
<td>G1R9</td>
</tr>
<tr>
<td>Computer Science and Mathematics</td>
<td>3 years</td>
<td>GG14</td>
</tr>
<tr>
<td>Computer Science and Mathematics with Industrial Experience</td>
<td>4 years</td>
<td>GG41</td>
</tr>
<tr>
<td>Mathematics and Physics</td>
<td>3 years</td>
<td>FG31</td>
</tr>
<tr>
<td>Mathematics and Philosophy</td>
<td>3 years</td>
<td>GV15</td>
</tr>
<tr>
<td><strong>MMath &amp; Phys</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics and Physics</td>
<td>4 years</td>
<td>FG3C</td>
</tr>
</tbody>
</table>

Notes

Mathematics with Finance and Mathematics with Business and Management are run jointly with the world-renowned Manchester Business School.

Actuarial Science and Mathematics is accredited by the Institute and Faculty of Actuaries and leads to up to seven exemptions from the professional examinations.

Mathematics with a Modern Language students will spend year 3 abroad (either studying or undertaking paid work). The available languages are; French, German, Italian, Japanese, Russian, and Spanish. The language part of the programme has two slightly different versions, classified as “post A-level” and “beginners’ level”. You follow the post A-level programme if you have achieved A-level grade A or B (or equivalent) in your chosen language, and the beginners’ programme otherwise. Please note: there is no beginners’ programme in French.

In 1st year, Mathematics and Philosophy includes Philosophy units such as; “Values We Live By”, “Mind and World” and “Discovering Reality”.

Entry requirements

Typical requirements for entry into each degree are detailed below. Even though the typical offers may be similar across our range of degrees, we emphasise that each application is considered separately on its own merits and each offer is individual. We also have separate English language requirements, listed below.

Typical A-level offer
A*AA - AAA

International Baccalaureate
Typically, we will ask for 37 points overall; of these 18 or more should be at Higher Level, including 6 in Mathematics and also including (for G1R9 only) 5 in the required language.

Scottish Highers/Advanced Highers
We will typically ask for grades AAA in Advanced Highers, or grades AAAAA in four Highers, or some equivalent combination of Advanced Highers and Highers with top grades.

Other qualifications
Please enquire for details if you are taking other equivalent qualifications.

Mature students
We welcome applications from mature students. We would look for evidence that you are able to achieve success on a demanding full-time programme, as well as evidence that you have the required mathematical ability and knowledge. You may find it helpful to contact an admissions tutor for advice before submitting an application through UCAS.

Deferred entry
Some students benefit from a year away from academic work between school and university. Accordingly, we welcome applications from prospective students of good ability who wish to defer entry to our University for one academic year, or those who are currently on such a gap year.

English language requirements

You must have an approved English language qualification, which can be one of several possibilities. These include IELTS (see below), or by achieving at least a grade C in GCSE English Language or equivalent.

For G100, G104, G1NH, G1NJ, GG13 and the non-Finance pathway of GGC3
IELTS 6.0 overall (with at least 6.0 in writing and 5.5 in each other component)

For G1N2, G1N3, NG31, GV15 and the Finance pathway of GGC3
IELTS 6.5 overall (with at least 6.0 in writing and 5.5 in each other component)

For G1R9
IELTS 7.0 overall (with at least 6.0 in each component).
Student profile
The University appealed to me because of the lively campus and I liked the fact that it was integrated with the rest of the city. I also already knew Manchester and I loved the city—there’s so much to do, the shopping is really good and the night life here is great.

Upon first visiting campus, I immediately fell in love with the University. I love the fact that most buildings lie on Oxford Road—the busiest and liveliest road in Manchester. I like that after lectures I can wander into a coffee shop, restaurant or bar or even have a curry on the Curry Mile. The people here seemed very friendly and staff members were willing to help. The range of societies offered also amazed me—there’s so many to choose from, every interest is catered for.

One of the main things I have enjoyed about studying maths at Manchester is the people I have met and the friends I have made. There’s a great sense of community within the department and the Alan Turing Building is definitely one of the best buildings on campus with access to brilliant facilities.

The course material is also interesting and lectures are engaging—I like that in third year I have been able to focus on the specific areas of maths I enjoy.

I am on the University’s competitive swimming team which has provided me with some amazing experiences and I’ve gained some great skills from it too. Fitting in training sessions around my work schedule has taught me how to balance my study and social activities. Training sessions are challenging, fun and a great way to keep fit.

The social side of being a part of the swimming team is amazing, with numerous nights out and events to go to. Competing for the University has also been a great experience—it’s kept me motivated and also enabled me to watch some great athletes compete including Olympians, Rebecca Adlington and Michael Jamison!

Deborah Lowi
Mathematics, 3 Years BSc.
Funding
Scholarships for UK students

School Entrance Scholarship
All new UK undergraduates admitted by our School of Mathematics, who achieve A* in Mathematics A-level plus grade A in two more A-levels (not counting General Studies), will be awarded a School Entrance Scholarship of £1000. Equivalent qualifications will also be considered.

Fourth-year scholarship
Our School has up to 15 generous scholarships for students on a Single-Honours degree programme in their fourth year. These competitive awards, decided on the basis of earlier years’ exam results, take the form of a complete fee waiver so that you would not need to pay any tuition fees for that year.

Other scholarships and bursaries
As well as our School scholarships, the University has a wide range of other awards detailed at:
www.manchester.ac.uk/study/undergraduate/student-finance

Scholarships for International students

International Mathematics Scholarship
Our School has a large number of these scholarships, each of which is worth £1,000 per year of study. All new international students will be awarded this scholarship. The award, which lasts as long as your undergraduate degree, is paid automatically in the first year; after that payment is subject to you maintaining at least a 50% exam average.

School International Excellence Scholarships
The School of Mathematics will award up to fifteen School International Excellence Scholarships. These competitive awards are for the successful international applicants who have demonstrated the highest overall academic excellence. The awards are worth £2,000 per year of study.

Faculty International Excellence Undergraduate Scholarships
TheFaculty of Engineering and Physical Sciences offers up to ten scholarships worth £2,000 per year for very well qualified international undergraduate students in the Faculty.
A wide range of career options is open to you as a Mathematics graduate

Some of these careers require subject specific knowledge and skills that are part of the Mathematics degree; others may depend mainly on ‘higher-order’ skills, such as numeracy, the ability to think logically and quantitatively, and the ability to analyse and solve complicated problems. Our Mathematics degrees are designed both to give you a good mathematical education and to develop these higher order skills.

The most popular areas of employment are financial work and management services, but postgraduate work and teaching are also popular choices. Mathematics graduates are much in demand and are less likely to be unemployed than the graduate population as a whole, with most finding permanent employment in due course.

Postgraduate study opportunities

The School of Mathematics offers a variety of opportunities for postgraduate study. About 18% of our graduates go on to take higher degrees, either in this University, or elsewhere.

Applications

Applications for all our first-degree programmes should be made through the Universities and Colleges Admissions Service (UCAS). In most cases, a conditional offer is made on the basis of the information supplied in the UCAS application together with the result of an interview. Find out more from the link below:

www.maths.manchester.ac.uk/study/careers
I work as a Consultant for Ernst & Young. I work both in IT audit and data analytics. I interview clients, produce reports, code in SQL, and design websites and mobile applications.

This is my first position since graduating in 2011. I was initially working only in the IT audit function and have since moved into a more analytical role because of my strengths in this area. This is due, in part, to the maths course I studied at Manchester.

The 2:1 requirement from a strong institution got me an opening interview. Arguably the analytical skills I developed during my MMath course are starting to come into use.

My greatest achievement to date is achieving top-of-class at a recent year-end review.

My advice to someone thinking of pursuing a similar career route would be—get expertise in something, and be known for that. Become a go-to for someone and you in turn can use them. There are no specific required skills, just strong people skills, a logical mind, honesty, ambition and determination.

I would recommend studying here in Manchester as it offers a unique blend of prestige and modernism in a great city.

Sam Thomas
Mathematics, 4 Years MMath.
Find out more online

Accommodation
Discover your new home:
www.manchester.ac.uk/accommodation

Admissions and applications
Everything you need to apply:
www.manchester.ac.uk/ug/howtoapply

Alan Gilbert Learning Commons
Take a look around our 24/7, independent learning space:
www.manchester.ac.uk/library/learningcommons

Careers
Take control of your career:
www.manchester.ac.uk/careers

IT Services
Online learning, computer access, IT support and more:
www.manchester.ac.uk/itservices

Library
We have one of the UK’s largest and best-resourced university libraries:
www.manchester.ac.uk/library

Maps
Find your way around our campus, city and accommodation:
www.manchester.ac.uk/aboutus/travel/maps

Prospectus
Download or order a copy of our prospectus:
www.manchester.ac.uk/study/undergraduate/prospectus

Childcare
Balancing your studies with your caring responsibilities:
www.manchester.ac.uk/childcare

Disability support
Talk to us about any support you need:
www.manchester.ac.uk/dso

Funding and finance
Get to grips with fees, loans, scholarships and more:
www.manchester.ac.uk/studentfinance

Careers
Take control of your career:
www.manchester.ac.uk/careers

International students
Let us help you prepare for your time here:
www.manchester.ac.uk/international

Sport
Get active with our clubs, leagues, classes and facilities:
www.manchester.ac.uk/sport

Support
Let us help with any academic, personal, financial and administrative issues:
my.manchester.ac.uk/guest

Students’ Union
Immerse yourself in societies, events, campaigns and more:
manchesterstudentsunion.com

Videos
Learn more about us on our YouTube channel:
www.youtube.com/user/universitymanchester
For further information about the courses, or about qualifications, please contact:

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Head of Admissions

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www.manchester.ac.uk/maths

**Disclaimer**  
This brochure is prepared well in advance of the academic year to which it relates. Consequently, details of courses may vary with staff changes. The University therefore reserves the right to make such alterations to courses as are found to be necessary. If the University makes an offer of a place, it is essential that you are aware of the current terms on which the offer is based. If you are in any doubt, please feel free to ask for confirmation of the precise position for the year in question, before you accept the offer.
“Pioneering innovation since 1824”

Engineering and Physical Sciences at Manchester

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