University of Sheffield

Maths and Statistics careers guide.

Shape your future from day one.

Be Sheffield Made.

More than a maths degree.

Maths graduates do lots of different things after their degrees. In this careers guide, you can find out where University of Sheffield mathematicians have gone after graduation, and how the skills, support and opportunities you'll get at university will help you secure the right job for you.

Develop the skills employers need.

By deciding to study maths, you're already off to a great start. As you train during your degree, you'll build a strong set of transferable skills that employers are looking for, including:

- numerical and data handling skills
- analytical and creative problem-solving skills
- research and report writing
- team working, presentation and other communication skills
- leadership and project management
- time management, planning and organisation

That's on top of all the specialist, professional maths knowledge that you'll gain from our expert mathematicians.

Helping you get to where you want to go.

Along the way, you'll find out more about yourself and what you'd like to do. There's support available at every step, including:

- Dedicated careers and skills development built into the curriculum
- CV and application workshops
- Mock assessment centres and practice interviews
- Placement year support
- Career Connect: our online platform for jobs and placement vacancies
- mySkills app: keep track of your achievements and skills development throughout your time at Sheffield
- eMentor scheme: talk to previous placement year students and recent graduates about their experience and successes
- One-to-one appointments for specialist guidance
- Careers fairs
- Employer events, networking sessions and lectures including talks from alumni

We want you to leave university ready for the future you want, so that, when the time comes, you can talk confidently and with evidence about your skills, experiences and personal strengths on your CV, in applications and at job interviews.

"My degree in maths has given me an excellent grounding in mathematical concepts which I am able to use in my everyday work and study. As well as this, maths teaches valuable analytic and logical thinking skills which are useful in many different types of jobs."

Sonia Nayyar, Mathematics BSc Actuarial Consultant, Lane Clark and Peacock

You won't be on your own once you finish your degree either – the University Careers Service will support you for as long as you need them after graduation.

What can I do with a maths degree?

Employers seek out our graduates because of their ability to solve problems.

As a University of Sheffield maths student you'll be trained to break a problem down, analyse the component parts, work out the best approach, and reach a solution in a clear, precise and logical way – all while accounting for any assumptions or estimates made along the way. This is great preparation for all kinds of careers, whether you want a job that involves doing lots of complex calculations, or one where you can help businesses, charities and policymakers find the best solutions to real-world problems.

Where could your degree take you?

Elizabeth Sheppeck
Mathematics
MMath

Elizabeth did a project on black holes as a student, then joined the Finance Leader Development Programme at BAE Systems, a major company in the aerospace industry.

Ashis Patel
Mathematics with a Placement Year BSc

Ashis did a placement at Lloyds Banking Group during his degree and after graduation secured a role as a digital strategy consultant at the IT company Accenture.

Sonia Nayyar
Mathematics BSc

Sonia is an Actuarial Consultant dealing with the measurement and management of risk and uncertainty at specialist actuarial firm, Lane Clark and Peacock, based in London.

Applying maths

There will always be a place for maths graduates in banking, insurance, pensions, and financial districts from the City of London to Wall Street. Big engineering companies need people who can crunch the numbers to keep planes in the sky and trains running on time. Healthcare providers rely on mathematicians to map the spread of disease and predict demand for services.

The 21st century has also created new career paths for our students. Smartphones, tablets, social networks and streaming services all use software and algorithms that need mathematical brains behind them. In the age of 'big data', everyone from rideshare apps to high street shops is gathering information that maths graduates can organise, analyse and interpret. The same technological advances have created new challenges and opportunities for mathematicians in cybersecurity and cryptography.

Further study and research

If the maths itself is what interests you, a PhD can lead to a career in research. Mathematicians working in universities and research institutes are trying to find rigorous proofs for conjectures that have challenged pure mathematicians for decades, or are doing the calculations behind major experiments, like those running on the Large Hadron Collider at CERN.

Beyond maths

A good degree from a great university can also take you far beyond the subject you've specialised in. We have graduates working in fields including teaching, management, advertising and publishing.

Example job titles and employers

- **Actuarial Manager**, EY
- **Analyst**, Leigh Day
- **Application Support Analyst**, Barclays
- **Data Scientist**, Peak
- **Corporate Tax Consultant**, Deloitte
- **Finance and Risk Analytics Manager**, Accenture
- **Operational Manager**, Sheffield Teaching Hospitals
- **Operational Researcher**, Department for Work and Pensions
- **Health Economist**, BresMed
- **Investment Manager**, Killik & Co
- **PhD student**, University of Cambridge
- **Senior Finance Manager**, Unilever
- **Software Engineer**, Chersoft
- **Sports Analyst**, bet365

Opportunities to enhance your CV.

Graduation might seem a long way off but it's never too early to start thinking about how you can gain additional skills and experience to make yourself stand out from the crowd.

Suzannah worked as a student statistician for NHS Blood and Transplant.

Work placements

A placement is a great opportunity to try out a career path that you're considering, whether you want to put your maths skills to the test in the real world or explore a different field entirely. It'll give you experience of applying for jobs as well as interview practice, and will make you stand out once you graduate. You can do this as a recognised part of your degree with our Placement Year courses.

Our students have previously completed their placements with organisations including Goldman Sachs, Unilever, Lloyds Banking Group and the Department for Work and Pensions.

Will published papers based on his summer research projects in solar physics, and is now doing a PhD at the University of Cambridge.

Research placements

If you're considering a research career, a great way to get additional experience is to join one of our undergraduate research experience schemes. This gives you a bursary to spend several weeks working with one of researchers over the summer break. You'll be able to get first-hand experience designing and carrying out major research projects, and time to work out if a career in research is right for you.

Go global

Laura went to the University of Wollongong in Australia for a year of her degree.

Spending time studying abroad is a great way to develop transferable skills. Our courses offer international opportunities, from spending a full year studying abroad at another institution, to attending an international summer school on a topic of your choice.

Employers are quick to recognise the personal growth that students go through when they study abroad, and that graduates who took this option can offer a fresh perspective.

Jobs and volunteering

Students volunteering at Discovery Night as part of Science Week.

Outside of your studies, there are clubs and societies you can join, committee and student rep roles you can go for, and lots of opportunities to volunteer with local organisations and gain extra skills and experience. Sheffield has plenty of part-time work opportunities too. It all adds to your CV.

Many students choose to work with us to develop their communication skills, by running maths sessions for local school children and events for the public. It's a great way to build your confidence and make new connections.

"I truly believe my placement at Goldman Sachs has not only prepared me for the world of work and made me more aware of what to look for in a job, but also matured my way of thinking."

Helen Walls, Mathematics with Placement Year BSc

Get down to details.

Because we want to keep our carbon footprint down, there's a lot we haven't included here. Find us online to learn more.

www.sheffield.ac.uk/maths/undergraduate
www.sheffield.ac.uk/study/career
www.youtube.com/sciencesheffield

maths.admiss@sheffield.ac.uk

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