

# Future Directions

## OPTIONS

Mathematics

## Careers and Employability

Keele students often ask what career options are open to them as a result of studying their particular subject at university. Here we provide examples of employment sectors and typical jobs that are closely linked to a degree in Mathematics. We highlight the importance of skills developed on this degree together with the destination figures of graduates from this discipline in 2018. You will also find links to relevant careers information for you to pursue your research, along with details of who to speak to for further advice.

### Occupational sectors

- Engineering
- Nanotechnology
- Finance
- Science Research
- Government
- Education
- Security
- Insurance
- Communications
- Meteorology

### Want to work as?

Many students are excited by careers that utilise the academic knowledge and skills developed on their degree:

- Statistician
- Research Scientist
- Secondary Teacher
- HE Lecturer
- Aeronautical Engineer
- Operational Researcher
- Software Engineer
- Actuary

### What else?

For those who do not wish to pursue a career directly related to their degree, here are some career ideas to open up options:

- Investment Analyst
- Market Researcher
- Chartered Accountant
- Systems Analyst
- Management Consultant
- Air Traffic Controller

### Sixty percent of jobs

This is the estimated number of jobs open to graduates of any discipline. It demonstrates the flexibility of many graduate employers when setting out their academic requirements and that students are not necessarily restricted to careers related to their degree. Both Prospects ([prospects.ac.uk](http://prospects.ac.uk)) and Targetjobs ([targetjobs.co.uk](http://targetjobs.co.uk)) have detailed information on all areas of graduate employment.

### Skills sought by employers

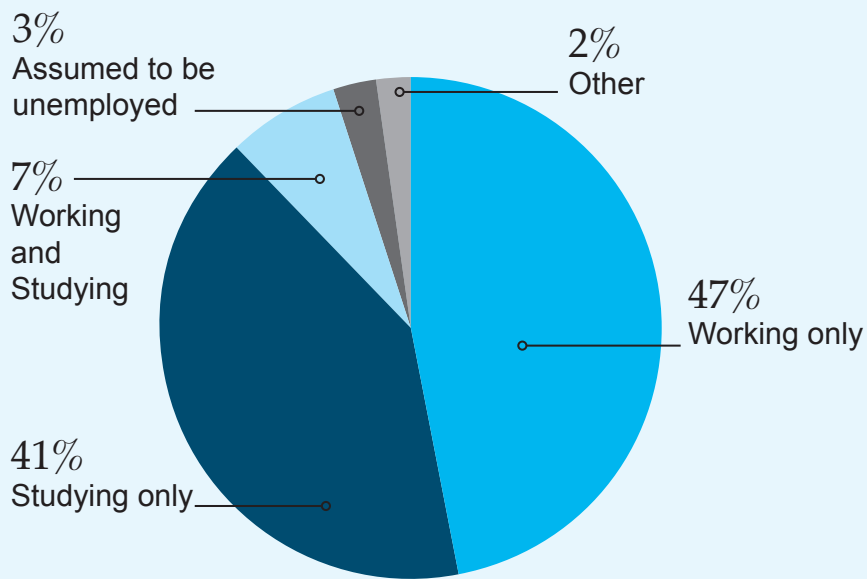
Regardless of which career you pursue after Keele, employers will want evidence of the range of skills and personal qualities you possess and which are required for the job. Your degree is clearly important in this respect but don't forget the extra-curricular activities, positions of responsibility, jobs and voluntary work you may have been engaged in while studying at Keele. These activities allow you to demonstrate the skills and personal qualities required by employers and will be vital in your attempts to secure graduate employment. More information on skills can be found on our website ([keele.ac.uk/careers](http://keele.ac.uk/careers)).

### The Higher Education Academy skills profile for Mathematics:

Demonstrate knowledge of key mathematical concepts and topics. Abstract the essentials of problems and formulate them mathematically and in symbolic form so as to facilitate their analysis and solution. Present mathematical arguments and the conclusions from them with accuracy and clarity. Have skills relating to rigorous argument and solving problems in general, and a facility to deal with abstraction including the logical development of formal theories. Focus on statistics that will have skills relating to the design and conduct of experimental and observational studies and the analysis of data resulting from them.

# Mathematics Destinations

of those who responded:



OF THOSE WHO RESPONDED		
Working only	41	46.6%
Studying only	36	40.9%
Working and studying	6	6.8%
Assumed to be unemployed	3	3.4%
Other	2	2.3%
<b>Total</b>	<b>88</b>	<b>100%</b>

The figures are based on the DLHE survey sent to Keele leavers 6 months after graduation. Remember that it can take time for leavers to find the type and level of work they are looking for. Relevant work experience and postgraduate study may be required. Graduate employment is competitive to enter and the quality of initial job applications needs to be good. See below for details of how we can help you develop your career plans and employability.

## What happened to Keele's Mathematics graduates?

Have you ever wondered what happens to students from your course after graduation? Each year, between December and March, Keele University, along with all other public funded universities in the UK, is required by the Higher Education Statistics Agency ([www.hesa.ac.uk](http://www.hesa.ac.uk)) to take part in the Destination of Leavers from Higher Education (DLHE) survey of those students who graduated the previous summer. The most recent data available (summer 2018) is for graduates who completed their undergraduate courses in 2016/17.

### Postgraduate study?

The number of students choosing to do further study after their degree varies between disciplines. Some students are strongly committed to studying their subject in greater depth and so will proceed to a higher level qualification, such as a masters or PhD. Others will be required to study at postgraduate level due to career choice and the need to gain appropriate qualifications. Mathematics graduates may need to do postgraduate study in order to specialise in areas such as operational research, finance and statistics. The 2018 destination figures for Mathematics show that 48% of graduates entered full-time study or part-time study and employment.

For further advice regarding postgraduate study speak to a Careers Consultant and go to the postgraduate study section on our website ([www.keele.ac.uk/careers/postgraduatestudy](http://www.keele.ac.uk/careers/postgraduatestudy)).

### Graduate level jobs?

Of those Mathematics graduates in employment 6 months after graduation, 57% were in graduate level jobs and 43% were in non graduate jobs.

### Further information

The Prospects website ([www.prospects.ac.uk](http://www.prospects.ac.uk)) contains extensive careers information.

The Institute of Mathematics and its Applications ([www.ima.org.uk](http://www.ima.org.uk)) has a careers section.

The skills profile was taken from The Higher Education Academy's Student Employability Profiles (<https://www.heacademy.ac.uk/knowledge-hub/student-employability-profiles>).

## What Careers and Employability can do for you

- Develop your career plans, no matter at what stage they may be, through one-to-one interviews.
- Help you find graduate vacancies and internships.
- Make sure your CV and job applications stand out for all the right reasons.
- Prepare you for graduate job interviews and assessment centres.
- Our website ([keele.ac.uk/careers](http://keele.ac.uk/careers)) has details of vacancies, internships, events and guidance interviews.
- Provide you with these services for three years after graduation.

[keele.ac.uk/careers](http://keele.ac.uk/careers)