

# Career Resources for Mathematics and Statistics Students

## Think about your skills

Studying mathematics at Leeds will give you an excellent base for your future career. Mathematics is one of the oldest subjects in the world – and hence a mathematical background is welcomed and highly prized by employers. Employers love mathematicians - they value highly-qualified graduates with the ability to think logically. Many graduates from your course go into business and finance and there is also a specific need for your skills in the science and technology sector. Those of you studying actuarial mathematics or statistics will also be well prepared to embark on a career in these particular professions.

As a mathematics or statistics graduate you will acquire and develop a range of skills, both specific and general throughout your degree. Your highly developed numerical skills will allow you to be able to use numerical concepts and arguments throughout your work. Consider these alongside your other activities, such as paid work, volunteering, family responsibilities, sport, membership of societies, leadership roles. These are some of the skills you will be able to demonstrate from your degree course.

**Analytical Skills** – You will develop an analytical approach and be able to apply logical reasoning to problem solving. You will be highly adaptable, being able to address new problems in new contexts and transferring knowledge from one problem to another.

**Communications Skills** – You will have become an effective and articulate communicator through your work and will be able to present complex ideas and reasoned arguments to your peers. Explaining your ideas, answering questions, communicating results and outlining the main details of reports is likely to be a key feature of the degree course.

**IT Skills** - High-level IT skills will be developed through the use of computer applications which you will be able to apply in a range of contexts.

You will also have developed more general transferable skills including:

- planning and organisation
- intellectual independence
- data interpretation
- team working.

The sheets 'Options with Mathematics' [www.prospects.ac.uk/options\\_mathematics\\_your\\_skills.htm](http://www.prospects.ac.uk/options_mathematics_your_skills.htm) or 'Options with Statistics' [www.prospects.ac.uk/options\\_statistics\\_your\\_skills.htm](http://www.prospects.ac.uk/options_statistics_your_skills.htm) will give you further information. Also look at: <http://careerweb.leeds.ac.uk/students/planning-and-deciding/choosing-a-career/employability-skills.asp> and list the skills you have to offer with examples and also the Virtual Careers Coach on: [www.graduatesyorkshire-vcc.info/](http://www.graduatesyorkshire-vcc.info/).

## What motivations and values influence your job choice?

The skills you can offer are part of the story, but you also need to consider factors like values, interests and motivation in deciding on a fulfilling career. You can use the Prospects Planner [www.prospects.ac.uk/links/pplanner](http://www.prospects.ac.uk/links/pplanner) career planning tool to help you decide.

## Careers Centre Resources for Mathematics and Statistics students

Work experience, both paid and voluntary, is valuable when you start job hunting regardless of the career you wish to pursue. We have resources at the careers centre and on our website to help you: <http://careerweb.leeds.ac.uk/students/work-experience/index.asp>.

There could be Leeds graduates working in an area that interests you, so check out the University of Leeds Graduate Careers Network database at: [www.graduatemcareersnetwork.leeds.ac.uk/](http://www.graduatemcareersnetwork.leeds.ac.uk/)

Keep an eye on Careers Centre events – presentations, workshops and fairs – all are advertised on our website.

The advisory staff at the Careers Centre (5-7 Cromer Terrace) will be happy to discuss your career plans with you and Senior Careers Consultant, Caroline Ramage, holds regular surgeries in the department. The following resources in our Information Room may also help with your career planning:

## Sources of information for Mathematics and Statistics students

The graduate career handbook - Shirley Jenner

Guardian guide to careers - Ian Wylie

A – Z of careers and jobs

Moving on in your career - Lynda Ali

What next after university? - Simon Kent

Turn your degree into a career - Michael Collins

How to get a job you'll love

Build your own rainbow - Barrie Hopson

The art of building windmills - Peter Hawkins

What color is your parachute? - Richard Nelson Bolles

Employability skills - Stuart Moss

Career skills - David Littleford

Skills for success - Stella Cottrell

Occupations files:

Section A - Education

Section I - Actuarial Work, Pensions & Insurance

Section J - Accountancy & Financial Management

Section M – Information Technology

Section O - Research & Management Services

We also have books, leaflets and DVDs to help with applications, CVs and interviews.

## Further sources of information and vacancies for Mathematics and Statistics related careers

### General

University of Leeds Careers Centre vacancies website: <https://stars.leeds.ac.uk>

Prospects website: [www.prospects.ac.uk](http://www.prospects.ac.uk)

Prospects Jobs and Courses: [www.prospects.ac.uk/links/graduate](http://www.prospects.ac.uk/links/graduate)

Prospects Finalist: [www.prospects.ac.uk/links/finalist](http://www.prospects.ac.uk/links/finalist)

Doctor Job: [www.doctorjob.com.my/](http://www.doctorjob.com.my/)

TARGETjobs: <http://targetjobs.co.uk/graduate-jobs/>

Jobs.ac.uk: [www.jobs.ac.uk](http://www.jobs.ac.uk)

The Guardian: [www.guardian.co.uk](http://www.guardian.co.uk)

The Times: [www.thetimes.co.uk](http://www.thetimes.co.uk)

The Times Educational Supplement (TES): [www.tes.co.uk](http://www.tes.co.uk)

Local Government Jobs: [www.lgjobs.com](http://www.lgjobs.com)

Graduates Yorkshire: [www.graduatesyorkshire.co.uk](http://www.graduatesyorkshire.co.uk)

### Accountancy

#### Chartered Accountant

Chartered accountants are responsible for financial reporting, taxation, auditing, forensic accountancy, corporate finance and insolvency. They play a strategic role by providing professional advice, aiming to maximise profitability on behalf of their client or employer. Training to be a chartered accountant involves undertaking a training contract with an employer approved by the relevant professional body.

#### Certified Accountant

Training to become a chartered certified accountant generally involves a combination of the Association of Chartered Certified Accountants (ACCA) examinations with supervised relevant practical experience.

#### Management Accountant

The Chartered Institute of Management Accountants is the only international professional qualification with a syllabus and examinations that focus solely on the education and training of management accountants in business - 99% of CIMA members and students work in business and not in accountancy practices.

#### Public Finance Accountant

The Chartered Institute of Public Finance and Accountancy is the main professional body and its qualifications develop candidates as accountants and financial managers. Many employers offer paid study leave and structured training schemes. Trainees are also required to experience a range of finance, accountancy and audit functions in the workplace, normally guided by a qualified colleague.

Association of Accounting Technicians (AAT): [www.aat.org.uk](http://www.aat.org.uk)

Association of Chartered Certified Accountants (ACCA): [www.accaglobal.com/students/](http://www.accaglobal.com/students/)

Association of International Accountants: [www.aia.org.uk](http://www.aia.org.uk)

Chartered Institute of Management Accountants (CIMA): [www.cimaglobal.com](http://www.cimaglobal.com)

CIPFA: [www.cipfa.org.uk/](http://www.cipfa.org.uk/)

Institute of Chartered Accountants in England and Wales (ICAEW): [www.icaew.co.uk](http://www.icaew.co.uk)

Institute of Chartered Accountants in Ireland (ICAI): [www.ical.ie](http://www.ical.ie)

Institute of Chartered Accountants of Scotland (ICAS): [www.icas.org.uk](http://www.icas.org.uk)

Institute of Internal Auditors (IIA) - UK and Ireland: [www.iaa.org.uk](http://www.iaa.org.uk)

The Insolvency Service: [www.insolvency.gov.uk](http://www.insolvency.gov.uk)

ACCA Scotland: [www.scotland.accaglobal.com](http://www.scotland.accaglobal.com)

ACCA Wales: [www.wales.accaglobal.com](http://www.wales.accaglobal.com)

Accountancy: [www.accountancymagazine.com](http://www.accountancymagazine.com)

AccountancyAgeJobs.com: [www.accountancyagejobs.com](http://www.accountancyagejobs.com)

eFinancialCareers: [www.efinancialcareers.co.uk](http://www.efinancialcareers.co.uk)

Inside Careers: Chartered Accountants: [www.insidecareers.co.uk/802574d8004065d8.nsf/opendatabase](http://www.insidecareers.co.uk/802574d8004065d8.nsf/opendatabase)

TARGETjobs Finance: <http://targetjobs.co.uk/finance>

## Actuary

Actuaries make assessments of risks and probabilities based on analysis of past events. Applying probability theory, statistics and investment theory, they provide commercial and financial advice on the management of assets, particularly over the long term. Training is mainly in-service, which includes correspondence courses with regular tutorials and block revision courses leading up to examinations. Qualification takes around three to six years.

*The Actuarial Profession:* [www.actuaries.org.uk](http://www.actuaries.org.uk)

*The Actuary:* [www.the-actuary.org.uk/](http://www.the-actuary.org.uk/)

*The Actuarial Profession: Find an Actuarial Firm* [www.actuaries.org.uk/research-and-resources/find-actuarial-firm](http://www.actuaries.org.uk/research-and-resources/find-actuarial-firm)

*The Association of Consulting Actuaries:* [www.aca.org.uk](http://www.aca.org.uk)

*Financial Times:* [www.ft.com](http://www.ft.com)

*Lloyd's of London:* [www.lloyds.com](http://www.lloyds.com)

*HM Treasury:* [www.hm-treasury.gov.uk/career\\_index.htm](http://www.hm-treasury.gov.uk/career_index.htm)

*Company of Actuaries:* [www.companyofactuaries.co.uk/](http://www.companyofactuaries.co.uk/)

*Inside Careers: Actuaries:* [www.insidecareers.co.uk/802574d8004f01d1.nsf/lopendatabase](http://www.insidecareers.co.uk/802574d8004f01d1.nsf/lopendatabase)

*TARGETjobs Finance:* <http://targetjobs.co.uk/finance>

## Investment Analyst

Fund managers use the expertise of investment analysts to make decisions relating to their portfolios. Some analysts work for management companies providing information in-house. Others may work for stockbrokers or investment banks assisting clients.

*Leeds University Union Trading and Investment Society (LUUTIS)*

[www.leedsuniversityunion.org.uk/clubsandsocieties/generalinterest/tradingandinvestment/](http://www.leedsuniversityunion.org.uk/clubsandsocieties/generalinterest/tradingandinvestment/)

*Association of Private Client Investment Managers and Stockbrokers:* [www.apcims.co.uk](http://www.apcims.co.uk)

*Chartered Financial Analyst Institute:* [www.cfainstitute.org](http://www.cfainstitute.org)

*Chartered Institute for Securities and Investment:* [www.securities-institute.org.uk](http://www.securities-institute.org.uk)

*Financial Services Authority:* [www.fsa.gov.uk](http://www.fsa.gov.uk)

*Association for Financial Markets in Europe (AFME)* [www.afme.eu/](http://www.afme.eu/)

*Professional Investor – 10 issues per annum:* [www.marchpublishing.co.uk/pi.html](http://www.marchpublishing.co.uk/pi.html)

## Operational Research

Operational researchers make use of analytical and creative skills to assist organisations to develop better systems and operational procedures. A first or 2.1 honours degree in a numerate subject is required.

*Datatech Search and Selection:* [www.datatech.org.uk](http://www.datatech.org.uk)

*Defence Science and Technology Laboratory (Dstl):* [www.dstl.gov.uk](http://www.dstl.gov.uk)

*Department for Business, Innovations and Skills:* [www.bis.gov.uk/](http://www.bis.gov.uk/)

*Engineering and Physical Sciences Research Council (EPSRC):* [www.epsrc.ac.uk](http://www.epsrc.ac.uk)

*EURO - The Association of European Operational Research Societies:* [www.euro-online.org](http://www.euro-online.org)

*Government Operational Research Service:* [www.operational-research.gov.uk/recruitment](http://www.operational-research.gov.uk/recruitment)

*INFORMS - Institute for Operations Research and the Management Sciences:* [www.informs.org](http://www.informs.org)

*International Federation of Operational Research Societies (IFORS):* [www.ifors.org/](http://www.ifors.org/)

*Management Services Journal:* [www.ims-productivity.com/page.cfm/content/Management-Services-Journal/](http://www.ims-productivity.com/page.cfm/content/Management-Services-Journal/)

*Ministry of Defence (MoD):* [www.mod.uk](http://www.mod.uk)

*NHS Careers:* [www.nhscareers.nhs.uk/](http://www.nhscareers.nhs.uk/)

*OR (Operational Research) Society:* [www.theorsociety.com](http://www.theorsociety.com)

## Statistician

Statisticians are concerned with the collection, analysis, interpretation and presentation of quantitative information. They work in a range of sectors including health, education, government, finance, the environment, transportation, market research and throughout industry, business and commerce.

Association of Clinical Data Management: [www.acdm.org.uk](http://www.acdm.org.uk)  
Biomathematics & Statistics Scotland: [www.bioss.sari.ac.uk](http://www.bioss.sari.ac.uk)  
Civil Service [www.civil-service.gov.uk/jobs/index](http://www.civil-service.gov.uk/jobs/index)  
Datatech Search and Selection: [www.datatech.org.uk](http://www.datatech.org.uk)  
The General Register Office for Scotland (GROS): [www.gro-scotland.gov.uk](http://www.gro-scotland.gov.uk)  
Health Protection Agency (HPA): [www.hpa.org.uk](http://www.hpa.org.uk)  
Health Service Journal: [www.hsj.co.uk](http://www.hsj.co.uk)  
Higher Education Statistics Agency (HESA): [www.hesa.ac.uk](http://www.hesa.ac.uk)  
Information and Statistics Division Scotland (ISD): [www.isdscotland.org](http://www.isdscotland.org)  
Institute of Clinical Research (ICR): [www.crjobs.org](http://www.crjobs.org)  
Medical Research Council (MRC): [www.mrc.ac.uk](http://www.mrc.ac.uk)  
Medicines and Healthcare Products Regulatory Agency (MHRA): [www.mhra.gov.uk](http://www.mhra.gov.uk)  
New Scientist: [www.newscientist.com](http://www.newscientist.com)  
NHS Careers: [www.nhscareers.nhs.uk](http://www.nhscareers.nhs.uk)  
Office for National Statistics (ONS): [www.statistics.gov.uk](http://www.statistics.gov.uk)  
PharmiWeb: [www.pharmiweb.com](http://www.pharmiweb.com)  
Royal Statistical Society (RSS): [www.rss.org.uk](http://www.rss.org.uk)  
Scottish Government: [www.scotland.gov.uk](http://www.scotland.gov.uk)  
Statisticians in the Pharmaceutical Industry (PSI): [www.psiweb.org](http://www.psiweb.org)

## Teacher

Graduates are required to gain Qualified Teacher Status (QTS) before they can teach in a state school. The most common route to qualifying as a teacher is by doing a one-year a Postgraduate Certificate in Education (PGCE) course.

Association of Teachers and Lecturers (ATL): [www.atl.org.uk/](http://www.atl.org.uk/)  
Department for Business, Innovation and Skills (DIUS): [www.dius.gov.uk](http://www.dius.gov.uk)  
Education Yearbook, Pearson Education, Annual  
GTTR (Graduate Teacher Training Registry): [www.gttr.ac.uk](http://www.gttr.ac.uk)  
General Teaching Council for England (GTC): [www.gtce.org.uk](http://www.gtce.org.uk)  
General Teaching Council for Scotland (GTCS): [www.gtcs.org.uk](http://www.gtcs.org.uk)  
NASUWT (National Association of Schoolmasters and Union of Women Teachers): [www.nasuwt.org.uk](http://www.nasuwt.org.uk)  
National Curriculum Online: [www.nc.uk.net](http://www.nc.uk.net)  
National Union of Teachers (NUT): [www.teachers.org.uk](http://www.teachers.org.uk)  
The Office for Standards in Education, Children's Services and Skills (OFSTED): [www.ofsted.gov.uk](http://www.ofsted.gov.uk)  
The Scottish Government - Education and Training: [www.scotland.gov.uk/Topics/Education](http://www.scotland.gov.uk/Topics/Education)  
Teach First: [www.teachfirst.org.uk](http://www.teachfirst.org.uk)  
TeacherNet: [www.teachernet.gov.uk](http://www.teachernet.gov.uk)  
Training and Development Agency for Schools (TDA): [www.tda.gov.uk](http://www.tda.gov.uk)

## Have you considered postgraduate study?

Approximately 20% of Mathematics and Statistics graduates stay on to do postgraduate study. Some enhance their knowledge in the subject by embarking on a PhD or Masters. The following sources are available to help you choose a course:

University of Leeds Postgraduate Prospectus: <http://tldynamic.leeds.ac.uk/pgprospectus/>

Prospects PostGrad Database: [www.prospects.ac.uk/links/pgdbase](http://www.prospects.ac.uk/links/pgdbase)

FindAPhD: [www.findaphd.com/](http://www.findaphd.com/)

FindAMasters: [www.findamasters.com/](http://www.findamasters.com/)

Hotcourses: [www.hotcourses.com](http://www.hotcourses.com)

## Would you like help with your application?

We have lots of resources in our Information Room and on our website

(<http://careerweb.leeds.ac.uk/students/applying-and-competing/index.asp>) to help with applications and impress employers. Don't forget that our advisory staff will also be happy to check over your application form or CV. It is best to bring along details of the job with your application so that we can check you have targeted it effectively. Check our website (<http://careerweb.leeds.ac.uk/students/what-we-offer/services/careers-advice.asp>) for times of our drop-in service.

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Revised JH  
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