Mathematics graduates and the employment market

Graduates of Mathematics acquire a wide range of skills and qualities that are valuable in many professions. The combination of numerate and literate skills is highly sought after by many sectors of employment. These skills include:

- Ability to think rationally and solve complex quantitative problems
- Ability to process complex data reliably and construct and use mathematical models
- Ability to understand and adhere to rules of evidence
- High level IT and numerical skills
- Communication skills and ability to explain and communicate ideas and results effectively
- Appreciation and understanding of the complexity of events and processes
- Produce logical arguments supported by evidence
- Communication skills – oral and written
- Self-discipline, self-direction, independence of mind and initiative alongside an ability to work with others

Source: "Degrees of Skill: Student Employability Profiles" The Higher Education Academy.
Typical jobs for Mathematics graduates

Mathematics graduates find employment in diverse fields. Here are some of the most popular career destinations for our Mathematics graduates:

Accountant • Statistician • Actuary • Risk Analyst
Trader • Banker • Tax Analyst • Investment Analyst
Software programmer • Financial Adviser/Planner
Data Analyst • Informatics Scientist • Technical Writer
Management Consultant • Teacher/Mathematics Lecturer

Note: Further qualifications may be needed for certain positions. This list is a sample of positions available.

Career Destinations of our Mathematics Graduates

It is useful to know what fellow graduates have done after obtaining their degree at NUI Galway. The following are some of the roles our Mathematics graduates took up after graduation:

• Graduate Programme, Bank of Scotland, Ireland
• Call Centre, GE Money Clare
• Museum Assistant, Knock Museum, Co. Mayo
• SAS Consultant, Base 3 Systems, UK
• Analyst Graduate Programme, Bank of Ireland, Dublin
• GIFT Programme, Fidelity Investments, Galway
• Computer Technician, Dell
• Insurance Advisor, Ark Life, Dublin
• Trainee Actuary, Rolfe and Nolan, London
• Financial Work, Mercers, Dublin
• Trainee Accountant, Deloitte and Touche

Source: NUI Galway First Destinations Survey

Boosting your employability as a Mathematics Graduate

Many Mathematics students pursue a degree in maths simply because they are good at mathematics. When choosing a career path it is important to consider what your interests are. A maths degree will be highly valued by most employers and for a variety of careers such as business, finance, IT, health, government, education, research, sport, gaming, security, bioinformatics, genetics, digital imaging and many other options.

All these careers require the analytical, data processing, accuracy skills, and high level IT skills, of which a Mathematics degree is excellent preparation.

Work experience is also a key issue and any experience you have to add to your CV will be a bonus. Volunteering is also an excellent way of adding experience to your CV.

The Career Development Centre at NUI Galway has some reference books that may help find work experience and some of the websites listed at the end of this leaflet also offer information on job opportunities.

There are some publications that may help keep you up-to-date. These publications also have many advertisements from companies and consultancies and so can help also with job search and may be available to reference in the Careers library.
For certain career choices, employers may look for candidates with further qualifications and training. Our Mathematics graduates frequently choose one of the following postgraduate programmes at NUI Galway:

- Postgraduate Diploma in Education
- MA (Mathematics/ Mathematical Science)
- Higher Diploma in Business Studies
- Postgrad Diploma/ MA Digital Media
- Higher Diploma Applied Science (Software Design and Development)

Other postgraduate programmes undertaken by previous Mathematics graduates include:
- Graduate Diploma in Primary Teaching, Mary Immaculate College, Limerick
- Postgraduate certificate in Education, South Bank University
- Graduate Entry to Medicine, UL
- Masters in Computational Finance, UL
- MSc in Supply Chain Management, DIT
- Masters in Mathematics, Edinburgh

For information on studying in Ireland and studying abroad with useful links for many countries worldwide visit:
- www.nuigalway.ie/careers
- www.postgradireland.com also has useful information on postgraduate courses in Ireland,
- www.prospects.ac.uk is an excellent site for researching opportunities in the UK and
- http://ec.europa.eu/ploteus/ covers the EU.
What our students say...

Hannah Healy
Bachelor of Arts

“There are many reasons why I chose to attend NUI Galway. It's a great campus with a fun atmosphere and many events taking place! I chose to study Arts because it gives you a wide variety of subjects to choose from, so it seemed the best option for me. I hope to do a postgraduate programme in Public Relations once I’m finished.

Being from Galway, I enjoyed the comfort of always being welcomed by a familiar face. Having said that I still wanted the other advantage of college life, meeting new people and getting involved in all the great clubs and societies NUI Galway had to offer. In first year I joined the Surf Club and went on numerous weekend and day trips throughout the year and the craic you have on those is unbelievable!

NUI Galway is a great university with such friendly open-minded people and I’m sure whoever decides to attend Galway will love it as much as I do.”

Where can I find out more?

The following websites contain relevant, interesting information on career opportunities with a degree in Mathematics

Irish Maths Society www.maths.tcd.ie/publications/ims/

EUROPE
Plus Magazine http://plus.maths.org
Mathematical Association www.m-a.org.uk
Royal Statistical Society www.rss.org.uk
Institute of Math. UK www.ima.org.uk
Maths Careers www.mathcareers.org.uk/
European Math. Society www.euro-math-soc.eu
European Math. Info Service www.emis.de

INTERNATIONAL
American Statistics Assoc. www.amstat.org/careers/
American Mathematical Society www.ams.org
Institute of Math. www.ima.umn.edu
Australian Maths Society www.austms.org.au
www.math-jobs.com/

GENERAL STUDENT/GRADUATE WEBSITES
Career Development Centre, degree opportunities:
www.nuigalway.ie/careers/students/degreeopp.html
Gradireland www.gradireland.com
Prospects UK Maths profile
www.prospects.ac.uk/options_mathematics_your_skills.htm
www.newscientist.com/graduate
www.jobs.ac.uk [academic jobs, fellowships etc UK, Europe and worldwide]