

# Maths

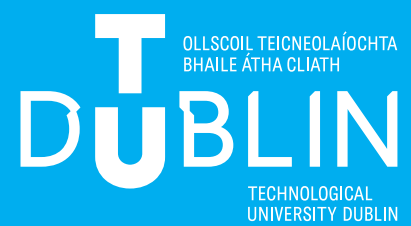
Your Careers Advisers

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[www.tudublin.ie/careers](http://www.tudublin.ie/careers)



## Skills developed in college

You have developed a range of skills through your education, work experience and personal interests and achievements. Understanding what skills you have to offer and like to use can help you understand what you want in a career, as well as providing key information for job or further study applications.

In terms of securing a job, academic qualifications alone will not guarantee success. Evidence –based skills sections on your CV can demonstrate the broad range of qualities you have to offer employers. Here are some of the main skills you may have developed while in college:

- **Communication skills, both verbal and written**  
Expressing ideas effectively and conveying information appropriately and accurately. Influencing others by expressing yourself in a group and in one to one situations. Showing a range of verbal and nonverbal signals to demonstrate that the information being received is understood. You have negotiated your way through complex communications on various projects you've participated in, from initial briefing, through to report writing and presenting to varied audiences.
  - **Teamwork / Working with Others**  
Working effectively and confidently within a group to achieve a common goal or task. This means that you understand your role within the team, as well as listen and support the other team members. Teamwork skills are developed in group projects in college as well in sporting clubs and college societies
  - **Problem-solving ability**  
Identifying, prioritising and solving problems, individually or in groups; possessing the ability to ask the right questions, sort out the many facets of a problem, and contribute ideas ,as well as answers. Having an eye for detail as well as the ability to adopt a common sense approach to solving problems under pressure has been something you've learned during your work.
  - **Time-management skills / ability to meet deadlines**  
Managing several tasks at once; being able to set priorities and to allocate time efficiently in order to meet deadlines. You have juggled course deadlines and assignments with part-time work or involvement in extra-curricular activities. This demonstrates that you are organised and can manage your time. Complex construction projects require effective organisation and time management if they are to be delivered to budget and on time.
  - **Planning and Organising**  
Establishing a course of action for self and/or others to accomplish a specific goal. Allocating resources appropriately.
  - **Leadership skills**  
Motivating and taking responsibility to lead other people, in order to achieve set goals and objectives.
  - **Initiative & self-management**  
Identifying opportunities and being proactive in putting forward ideas and potential solutions.  
Self-disciplined and self-motivated in the pursuit of studies and professional practice.
  - **Ability to make quick decisions / work under pressure (flexibility)**  
Making decisions and taking action. Maintaining performance under pressure and / or opposition.
- You may also have developed a wide range of technical / specific course related skills throughout your education (academic & extra-curricular), work experience and personal interests and activities

## Types of employers/industry sectors

Some of the main types of employers / industry sectors in which Maths graduates work include:

- accountancy
- aerospace and defence
- automotive
- biosciences
- business support services
- chemicals
- construction
- consultancies
- education – teaching second and third level
- engineering
- environment
- exploration
- geophysics
- financial services
- food and drink
- government
- healthcare
- insurance
- IT and computing
- manufacturing
- media
- metals and minerals
- operational research
- pharmaceuticals
- research institutions
- science and telecoms
- transport / travel
- utilities

For sector information see:

[www.gradireland.com](http://www.gradireland.com)

[www.careersportal.ie](http://www.careersportal.ie)

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

[www.targetjobs.co.uk](http://www.targetjobs.co.uk)

## Career options with your course

Some of main occupations related to your degree include:

- Accounts Manager
- Actuary
- Aeronautical Analyst
- Chartered accountant
- Data analyst
- Data scientist
- Investment analyst
- Investments Operator
- Loans Officer
- Operations Analyst
- Pensions Administrator
- Research scientist (Maths)
- Secondary school teacher
- Settlements Analyst
- Software engineer
- Statistician
- Tax Assistant
- Technical Consultant
- Transfer Agent
- Transport Planner

Jobs where your degree would be useful include:

- Civil Service fast streamer
- Financial manager
- Financial trader
- Insurance underwriter
- Operational researcher
- Software tester

Remember that many employers accept applications from graduates with any degree subject, so don't restrict your thinking to the jobs listed here.

For occupational information see

[www.gradireland.com](http://www.gradireland.com)

[www.careersportal.ie](http://www.careersportal.ie)

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

[www.targetjobs.co.uk](http://www.targetjobs.co.uk)

## Employers who have recruited in your area

Some of the companies who have recruited Maths graduates include:

- Bank of America – Financial Accounts
- C.PL – Operations Analyst / Transfer Agent / Associate
- I.F.D.S – Associate
- EY – Data Analyst
- Allianz – Pricing Analyst
- Community Credit Union - IF Officer & Data Analyst
- Credit Union - Loans Officer
- KPMG – Audit
- Paypal – Fraud Analyst
- Zurich Life – Unit Pricing Assistant

## Job Hunting

It is important that you access both the advertised and hidden jobs market and use any and every means available to you to job hunt effectively.

### Advertised Jobs

Most University and IT Careers Services have jobs listings on their websites:

[www.tudublin.ie/jobscene](http://www.tudublin.ie/jobscene)

Graduate programmes and immediate vacancies

[www.prospects.ac.uk](http://www.prospects.ac.uk) & [www.targetjobs.co.uk](http://www.targetjobs.co.uk)

Graduate jobs UK

[www.gradireland.com](http://www.gradireland.com)

Immediate jobs/Summer/Graduate programmes

[www.mondotimes.com](http://www.mondotimes.com)

Local and national press

[www.publicjobs.ie](http://www.publicjobs.ie)

[www.localgovernmentjobs.ie](http://www.localgovernmentjobs.ie)

Public service

[www.irishjobs.ie/agencies](http://www.irishjobs.ie/agencies)

Complete list of recruitment agencies/online recruitment sites

Company Websites - Immediate vacancies and Internships

[www.indeed.ie](http://www.indeed.ie) – Ireland (various job boards)

[irishjobfairy](https://twitter.com/irishjobfairy) (twitter)

## Other

- Careers fairs – Gradireland Fair – Autumn and Summer Fair, plus many others.
- Notice boards/Student email account/Lecturers
- Company Presentations
- Specialist Magazines

## Voluntary Sector/Charities

[www.activelink.ie](http://www.activelink.ie)

Voluntary Sector/Charity/NGO vacancies in voluntary sector

[www.volunteeringireland.com](http://www.volunteeringireland.com)

[www.dochas.ie](http://www.dochas.ie)

Association of non-governmental development organisations

[www.comhlahm.org](http://www.comhlahm.org)

Volunteering opportunities

[www.wheel.ie/directory](http://www.wheel.ie/directory)

Directory of voluntary and community organisations

## Unadvertised Jobs

### NETWORKING

- Job Shadow/Informational Interviewing/work experience
- Networking – who is in your network?
- Professional Bodies,
- Social networking sites (facebook, twitter, LinkedIn, Facebook, Fashion Blogs, discussion boards)
- Attend events,
- Businessandleadership.com (events)
- Get in touch with guest speakers
- Thesis / College projects/Placement/Site visits/guest speakers
- TU Dublin Societies
- First Destination Reports
- Join Alumni Association/Linked-in TU Dublin Alumni group

### CONTACT COMPANIES DIRECTLY

- Speculative applications + cold calling. Think about your offering
- Contact organisation with ideas
- Utilise directories – Kompass.com, IDA, professional bodies, Golden Pages

### ENTREPRENEURSHIP

- Freelancing/Work experience/Self-employment/Start-Up
- <http://www.dit.ie/careers/studentsgraduates/interestedinselfemployment/>
- TU Dublin Hothouse - [www.dit.ie/hothouse/](http://www.dit.ie/hothouse/)
- Local Enterprise Office - [www.localenterprise.ie](http://www.localenterprise.ie)
- The Digital Hub - [www.thedigitalhub.com](http://www.thedigitalhub.com)

### TRACK COMPANIES

- Check out Labour Market trends, ilo.org (Intl Labour Organisation, [www.careersportal.ie](http://www.careersportal.ie), IDA, IBEC
- Search newspaper business pages on-line to get success stories on businesses as they are growing – TU Dublin Careers website (labour market news)
- Industry award recipients
- Best Workplaces in Ireland (download on [gradireland.com](http://gradireland.com))
- Follow target companies on facebook, linked-in, twitter
- Think of small companies not just big brands

### OTHER PROACTIVE IDEAS

- Social networking sites (Facebook, Twitter, LinkedIn, Facebook, Blog, Discussion Groups) Linked-In (set up a profile, link to others, search for companies - employees who have Linked-in profiles, advertised

jobs)

- Follow target companies on Facebook, LinkedIn, Twitter
- Think of small companies not just big brands
- Consider alternative roles
- Undertake voluntary work

For more information on how to go about finding a job and job-hunting sites, [See www.tudublin.ie/careers](http://www.tudublin.ie/careers)

## Interviews

For more information on how to perform in interviews, [See www.tudublin.ie/careers](http://www.tudublin.ie/careers)

## CVs/Cover letters and applications

For information on how to put together a great CV/Cover Letter or Application, [See www.tudublin.ie/careers](http://www.tudublin.ie/careers)

## Useful links (e.g. Company Databases, Professional Bodies, LinkedIn Groups)

This list contains links to some of the most useful websites for your course including professional bodies and associations, employer directories, information sources and LinkedIn groups.

## General websites — useful links

- [The Irish Mathematical Society www.maths.tcd.ie/pub/ims/](http://www.maths.tcd.ie/pub/ims/)
- [American Mathematical Society www.ams.org/careers/](http://www.ams.org/careers/)
- [Institute of Mathematics http://ima.org.uk/](http://ima.org.uk/)
- [European Mathematical Information Service www.maths.tcd.ie/EMIS/](http://www.maths.tcd.ie/EMIS/)
- [European Mathematical Society http://euro-math-soc.eu/](http://euro-math-soc.eu/)
- [Careers in Mathematics www.mathscareers.org.uk/](http://www.mathscareers.org.uk/)
- [Plus Magazine Living Maths http://tinyurl.com/py2a8w4](http://tinyurl.com/py2a8w4)
- [Institute of Faculty and Actuaries: www.actuaries.org.uk](http://www.actuaries.org.uk)
- [Society of Actuaries in Ireland: www.actuaries.ie/](http://www.actuaries.ie/)

[TU Dublin library databases – has comprehensive listing of companies and commercial information in Ireland by sector](#)

## Careers open to all disciplines (Including 'Paths Into...' Series)

Many graduate vacancies don't require specific degree subjects as possession of a degree is taken as evidence of intellectual ability. What is more important to the potential employer is the range of transferable skills and experience you can demonstrate.

Many graduate training programmes take final year students from a wide range of disciplines, register with the [Career Development Centre's Jobsence](#) for a full list of programmes. Here is a range of career areas that are potentially open to graduates of all disciplines. It's important to note that some of these options may require further study either on the job or beforehand.

If you are considering diversifying or changing career direction a postgraduate conversion course may be a viable option.

Some examples of career areas open to students of all disciplines:

- Teaching & Education
- Financial Services & Accounting
- Marketing, Advertising and PR
- Retail, Sales and Customer Service
- Banking, insurance and financial services
- Charities and voluntary sector
- Fund management / administration and investment banking
- Human resources, recruitment and training
- Management consulting
- Management, business and administration
- Media and publishing
- Public sector and civil service
- Social, community and youth

For further information see: [www.gradireland.com/career-sectors](http://www.gradireland.com/career-sectors)

## Self Employment

Ever thought of being your own boss? Think you have an innovative product or service idea that could have commercial value? Want to commercialise your research? See [www.tudublin.ie/careers](http://www.tudublin.ie/careers)

## Further Study

Are you considering further study or training? See [www.tudublin.ie/careers](http://www.tudublin.ie/careers) for comprehensive information

Here are some examples of postgraduate courses pursued by Maths Graduates :

- PhD - UCC
- Masters in Financial Maths – UCD Michael Smurfit Graduate Business School
- Masters in High Performance Computing – TCD
- Master of Science Applied Mathematics & Theoretical Physics – TU Dublin
- PhD Cryptography – Queens University Belfast
- Masters in Quantitative Finance - UCD Michael Smurfit Graduate Business School
- MSc Actuarial Science - UCD Michael Smurfit Graduate Business School

Conversion courses

Some graduates find that their primary degree did not meet their expectations, either vocationally, academically or personally, and seek change career direction. Conversion courses offer the opportunity to diversify into another chosen career area while meeting the necessary entry requirements for that discipline. However, it should be noted that this is not the case for all disciplines e.g. disciplines such as science and engineering will require an undergraduate degree in that discipline.

## Other Options (e.g. Time out, travel etc.)

Volunteering and working with communities with is a great way to gain valuable real world experience, to develop new skills, to meet new people, to do something worthwhile and to improve your employability. For more details, see [www.tudublin.ie/careers](http://www.tudublin.ie/careers).

## Labour Market Information

For information on the latest labour market trends see [www.tudublin.ie/careers](http://www.tudublin.ie/careers).

## Additional Information / Advice

For any query you might have, please do not hesitate to get in touch with us.

Disclaimer: TU Dublin Career Development Centre offers advice in good faith on the basis of the best information available. The Centre accepts no responsibility for decisions made by individuals based on such advice.