



MATHS ROUTES

SUBJECT PATHWAYS

CAREERS

Many careers that are directly related to maths need higher education - and sometimes post graduate - qualifications, preferably in maths or a related subject. They include:

- Actuary
- Operational researcher
- Research scientist
- Statistician
- Teacher / lecturer

Maths is important for most jobs but especially for any needing high-level number skills e.g.

- Accountant
- Accounting technician
- Computer programmer
- Dispensing optician
- Economist
- Engineer (many types)
- Engineering technician
- Financial adviser
- Insurance underwriter
- Investment banker
- Meteorologist
- Optometrist
- Patent attorney
- Pensions manager
- Quantity surveyor
- Risk analyst
- Software developer
- Stockbroker
- Systems analyst
- Tax inspector

There are different routes into these careers, including higher education and, in some cases, apprenticeships. Check entry requirements as some may want maths A Level or equivalent.

SKILLS

Studying Maths can also help you develop wider skills such as:

- Accuracy
- Attention to detail
- Advanced numeracy
- Budgeting
- Communication
- Data handling
- IT Logical thinking
- Organising
- Problem solving
- Reasoning and analysis
- Teamwork
- Time management
- Working independently

These skills are needed for jobs at different levels and with a range of entry routes e.g.

- Air traffic controller
- Architect
- Architectural technologist
- Charity fundraiser
- Computer service technician
- Credit manager
- Electrician
- Helpdesk adviser
- Insurance broker
- Logistics manager
- Management consultant
- Market researcher
- Marketing officer
- Motor vehicle technician
- Pensions adviser
- Police officer
- Retail buyer
- Retail manager
- Sales assistant
- Site manager
- Solicitor
- Warehouse assistant

DID YOU KNOW?

Without maths, many advances in the modern world would never have happened. Mathematics is used in everything from designing a smart phone to mapping the human genome to devising online dating systems.

Several mathematicians work on 'The Simpsons' writing team and some episodes are peppered with mathematical references.

ROUTES

Many jobs require at least GCSE grade A*-C / 9-4 in maths.

You may need other subjects alongside maths, especially other sciences and English.

There are different routes into many careers, including full time study, higher education and apprenticeships.

You have to stay in learning until age 18. This can be in full time study, an apprenticeship or other job with training or a work based learning programme such as a traineeship.

FIND OUT MORE

For more job ideas, visit nationalcareersservice.direct.gov.uk/youngpeople then follow links to 'Aged 13-19' and 'Do something you're good at'.

If you're thinking about higher education, visit: www.prospects.ac.uk to see what art and design graduates have done after their degree.

Other websites

sheffieldfutures.org.uk

ucasprogress.com

ucas.com

icould.com

mathscareers.org.uk

ima.org.uk

nationalcareersservice.direct.gov.uk