

M A T H S R O U T E S

S U B J E C T P A T H W A Y S

# C A R E E R S

## Many careers that are directly related to maths need higher education and sometimes postgraduate 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.

# S K I L L S

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

D I D Y O U K N O W ?

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.

# R O U T E S

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.

F I N D O U T M O R E

For more job ideas, visit [nationalcareersservice.direct.gov.uk/youngpeople](https://nationalcareers.service.gov.uk/) 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](http://www.prospects.ac.uk/) to see what art and design graduates have done after their degree.

Hailey Hall Careers lead

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School independent Career advisors

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Laura Todd ( Essex students )[-Laura.Todd@essex.gov.uk](mailto:-Laura.Todd@essex.gov.uk)

**Other websites** [ucasprogress.com](http://www.ucasprogress.com/) [ucas.com](https://www.ucas.com/)

[icould.com](https://icould.com/) [mathscareers.org.uk](https://www.mathscareers.org.uk/) [ima.org.uk](https://ima.org.uk/)

[nationalcareersservice.direct.gov.uk](https://nationalcareers.service.gov.uk/)