

Careers involving Mathematics

**"Mathematics is the gate and key of the sciences...
Neglect of mathematics works injury to all knowledge,
since one who is ignorant of it cannot know the other
sciences or the things of this world."**

Roger Bacon

Studying maths helps you develop skills in logical thinking, problem-solving and decision-making, which are valued by employers across many job sectors.

Job options

Jobs directly related to your degree include:

- Actuarial analyst
- Actuary
- Chartered accountant
- Chartered certified accountant
- Data analyst
- Investment analyst
- Research scientist (maths)
- Secondary school teacher
- Statistician
- Systems developer

Jobs where your degree would be useful include:

- Civil Service fast streamer
- Financial manager
- Financial trader
- Insurance underwriter
- Meteorologist
- Operational researcher
- Quantity surveyor
- 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.

What have other mathematicians done?

Six months after graduating almost two-thirds of mathematics graduates are in employment or combining work and further study.

The top two jobs for mathematics graduates are finance and investment analyst and adviser, and chartered or certified accountant. Other roles in the top five include programmer, software developer and actuary.

A fifth of mathematics graduates are in further study. Of these, 40% continue their education in mathematics and a further 30% are trainee teachers.

Less obvious choices. There are many other career areas which don't necessarily require a maths or even a numerate degree. Many are open to graduates from any degree discipline, for example roles in the media, marketing, management, human resources, procurement, or sales. Over 50% of the vacancies we advertise on our website are for any degree discipline.

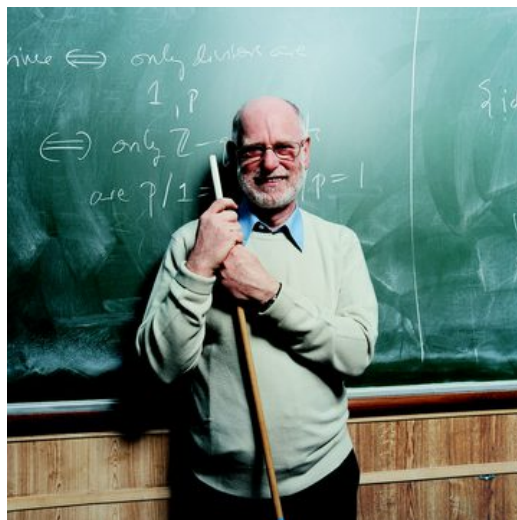
There's a demand for mathematicians and statisticians across a range of sectors. Mathematicians work in the petroleum and nuclear industries, medicine and health, IT, business consultancy and operational research, space science and astronomy, as well as many forms of engineering and different government departments.

Typical employers include:

- the NHS
- local and central government
- educational establishments
- the pharmaceutical industry
- IT companies
- engineering companies
- insurance companies
- market research and marketing companies
- finance, banking and accountancy firms.

There are also opportunities for employment with publicly-funded-research institutes or government agencies.

Professor/Teacher



Along with language teachers, math professors are some of the most sought-after kinds of teachers. Nearly every student who majored in mathematics is qualified to teach all levels of high school math, assuming she has had training as a teacher.

Computer Scientist



Computer science relies on both theoretical math and a solid background in many types of algebra. One of the most common major combinations for college students is a computer science and math double; people interested in one tend to like the other as well.

Engineer



The profession of engineer is one of the highest paying fields around. All types of engineers, from civil engineers to robotics engineers, require advanced math skills, including strong backgrounds in the mathematics of physics and motion.

Accountant



The accounting profession requires working with numbers on a daily basis. While most functions performed by accountants don't require extremely advanced math skills, having a solid grasp on math principles is a job requirement.

Day Trader



Working on Wall Street or in the stock market requires being able to make computations on a rapid-fire basis. For those working with firms like Morgan Stanley or Goldman Sachs, an understanding of derivatives and the mathematical relationship between markets and sets is a vital part of the job.

Cryptologist



Cryptologists come up with ways to encode data, while concurrently using mathematical principles and programming to defeat the codes and secrets of other cryptologists. Graduate students from top mathematics programs are often recruited directly after graduation to work as cryptologists for the National Security Administration.

Actuary



An actuary is a financial specialist who uses statistics and research to calculate risk and uncertainty. Large businesses hire actuaries to help make vital business decisions; due to the importance of the job function, actuarial work is extremely high paying.