

# MATHEMATICS AND STATISTICS

## **Overview**

The analytical and problem-solving skills offered by mathematics and statistics graduates put them in high demand across many different job sectors. Many graduates enter careers in accountancy, financial management, IT and data analysis and these job roles can be within large blue-chip organisations, big city finance companies, pharmaceutical industries, IT & engineering companies, start-ups and within the public sector.

## **Roles**

Each job title links through to a broad job description, salary and conditions, entry requirements, typical recruiters, and links to further useful information.

* [Actuary](https://www.prospects.ac.uk/job-profiles/actuary)
* [Aerospace Engineer](https://www.prospects.ac.uk/job-profiles/aerospace-engineer)
* [Medical Statistician](https://www.psiweb.org/careers/job-roles)
* [Chartered Accountant](https://www.prospects.ac.uk/job-profiles/chartered-accountant)
* [Cyber Security Analyst](https://www.prospects.ac.uk/job-profiles/cyber-security-analyst)
* [Data Analyst](https://www.prospects.ac.uk/job-profiles/data-analyst)
* [Financial Risk Analyst](https://www.prospects.ac.uk/job-profiles/financial-risk-analyst)
* [Government Statistician](https://analysisfunction.civilservice.gov.uk/careers/role-profiles-and-career-pathways/role-profile-statistician/)
* [Health Informatics Management](https://www.prospects.ac.uk/jobs-and-work-experience/job-sectors/healthcare/how-to-get-started-in-health-informatics)
* [Intelligence Analyst](https://www.prospects.ac.uk/job-profiles/intelligence-analyst)
* [Investment Analyst](https://www.prospects.ac.uk/job-profiles/investment-analyst)
* [IT Consultant](https://www.prospects.ac.uk/job-profiles/it-consultant)
* [Management Consultant](https://www.prospects.ac.uk/job-profiles/management-consultant)
* [Mathematical Modelling Consultant](https://plus.maths.org/content/career-interview-mathematical-modelling-consultant?)
* [Operational Researcher](https://www.prospects.ac.uk/job-profiles/operational-researcher)
* [Pharmaceutical Statistician](https://rss.org.uk/jobs-careers/career-development/types-of-job/pharmaceutical-statistician/#:~:text=Statisticians%20and%20statistical%20programmers%20in,and%20commercialisation%20of%20pharmaceutical%20products.)
* [Project Manager](https://www.prospects.ac.uk/job-profiles/project-manager)
* [Scientific Researcher](https://www.prospects.ac.uk/job-profiles/research-scientist-physical-sciences)
* [Tax Adviser](https://www.prospects.ac.uk/job-profiles/tax-adviser)
* [Transport Planner](https://www.prospects.ac.uk/job-profiles/transport-planner)
* [Underwriter](https://www.prospects.ac.uk/job-profiles/insurance-underwriter)

Many of the job roles above can be found in different areas of work. For example, a Data Analyst could be analysing huge data sets for a pharmaceutical company testing the effectiveness of a new drug or could be working for an engineering company working out how to improve fuel consumption for their new hybrid car. Data analysis and maths modelling skills are also wanted by insurance and weather consultancies looking to manage risk and by the Security Services such as MI5 and GCHQ wanting to check for patterns in information gathered.

You can view additional job roles by using the [Prospects](https://www.prospects.ac.uk/careers-advice/what-can-i-do-with-my-degree/mathematics) and [Indeed.com](https://uk.indeed.com/career-advice/finding-a-job/careers-in-maths) websites.

## **Building Experience**

Within your degree programme you can take a year-long professional placement or a summer placement – talk to your tutor or Placement Co-ordinator if this interests you. Many of the large graduate recruiters offer Insight Days (mainly for first year students) and summer work experience (typically for second year students) and these are advertised on the websites listed above. Having relevant experience will not only help you stand out to employers, but it can also highlight career areas that interest you.

* Build work experience for example through [Campus Jobs](https://www.reading.ac.uk/essentials/Campus-Jobs) or [securing an internship](https://www.ratemyplacement.co.uk/)
* Find volunteering opportunities such as [Reading Voluntary Action](http://rva.org.uk/) and [Reading Students' Union](https://readingsu.co.uk/student-opportunities/volunteering-and-fundraising)
* Apply for a paid research internship [UROP](https://www.reading.ac.uk/essentials/Careers/Gaining-experience/UROP) (penultimate year students only)
* Apply for the [Reading Internship Scheme](https://www.reading.ac.uk/essentials/Careers/Gaining-experience/RIS) – these are paid summer opportunities with local employers which are exclusive to UoR students. These opportunities, and many others are advertised on [My Jobs Online](https://reading.targetconnect.net/home.html)
* Get a [Thrive mentor](https://www.reading.ac.uk/essentials/Careers/Advice-and-development/Mentoring/THRIVE) and build a relationship with a professional (penultimate year students only)
* Get involved in a society: look at the full list of [societies](https://readingsu.co.uk/student-opportunities/societies) for one aligned to your interests
* If you are thinking about teaching as a possible career, you could consider volunteering for the University’s [Students in Schools](https://www.reading.ac.uk/essentials/Opportunities/Volunteering/Students-in-Schools) scheme.

## **Finding Opportunities**

**Financial Jobs**

[efinancial](https://www.efinancialcareers.co.uk/?gclid=Cj0KCQjwyLDpBRCxARIsAEENsrJBj9VOUbe7HY2WQTnfdWCfQEPzJxIpYLKkR7gJQHV5PJ3iuDy50v0aAvGCEALw_wcB&gclsrc=aw.ds)careers.co.uk

**STEM**

[STEM Careers](https://www.stem.org.uk/secondary/careers)

**Public Sector**

[jobs](https://www.jobs.nhs.uk/).nhs.uk

**Maths**

[Plus - Bringing Mathematics to Life](https://plus.maths.org/content/) | [BBC - Jobs That Use Maths](https://www.bbc.co.uk/bitesize/tags/zrsg6v4/jobs-that-use-maths/1) | [Maths Careers](http://www.mathscareers.org.uk/)

**Further Study/Research**

[University of Reading](https://www.reading.ac.uk/ready-to-study/study/postgraduate-study.aspx) | [Find a Masters](https://www.findamasters.com/) | [Find a PhD](https://www.findaphd.com/)

**Graduate Jobs**

[prospects](https://www.prospects.ac.uk/).ac.uk | [targetjobs](https://targetjobs.co.uk/).co.uk | [milkround](https://www.milkround.com/).com | [ratemyplacement](https://www.ratemyplacement.co.uk/).co.uk | [gradcracker](https://www.gradcracker.com/search/civil-building/environment-and-sustainability-jobs).com

## **Exploring Further**

There are many professional bodies associated with these areas which can provide useful information for example, the [Institute of Mathematics and its Applications](https://ima.org.uk/), [London Mathematical Society](https://www.lms.ac.uk/) and [Royal Statistical Society](https://rss.org.uk/).

The skills and knowledge you’ve developed in your degree will be valuable in a wide range of roles and sectors. If you’re thinking of looking further afield but aren’t sure where to start, why not [book an appointment](https://www.reading.ac.uk/essentials/Careers/Advice-and-development/MyJobsOnline) with one of our Careers Consultants? Remember, graduates can use the Careers Centre for up to two years after they graduate.

Explore our [Careers Blog](https://blogs.reading.ac.uk/careers/) for more industry guidance and useful careers advice!