

MATHS at UNIVERSITY



Why study maths at university?

People's Comments

"I always liked the problem solving aspect of doing maths at A level, which was why I chose this as a degree subject. At the start, I didn't have ideas about my future career but now that I'm graduating I'm looking for jobs in finance or as a statistician" (Habib, 22, final year, BSc Mathematics).

What careers are open with a maths degree?

Maths opens lots of doors; in business, finance, management, IT, research, teaching and many other areas. Visit www.mathscareers.org.uk for more details.

What will I get from a maths degree?

A maths degree is sometimes a continuation of your school maths and sometimes it will take you into new areas.

As well as the maths, you will develop the ability to be logical, argue coherently, understand abstract ideas and solve practical problems – all skills which employers value.

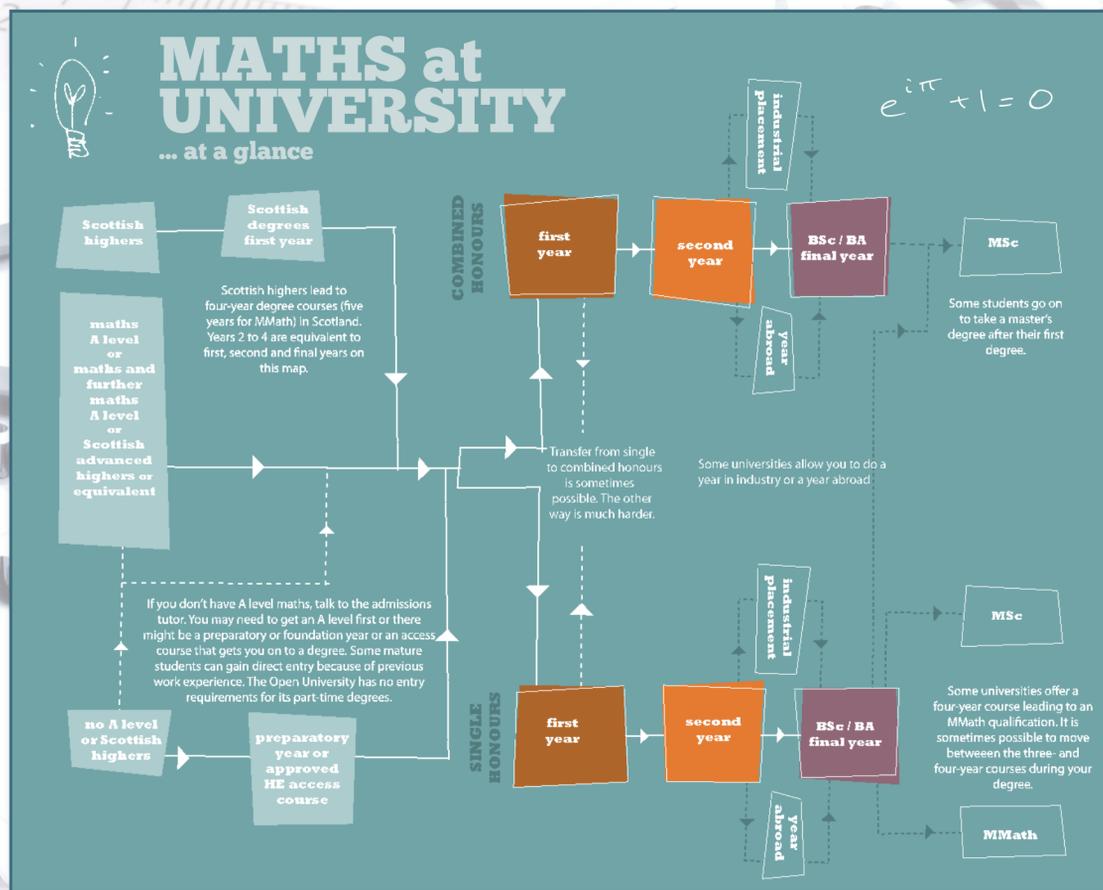
$$\frac{x^2}{p^2} + \frac{y^2}{q^2} = 1$$

Questions you should ask

- What do graduates from this course do after their degree?
- What proportion of graduates get jobs within six months of leaving this course? What proportion go onto further study?
- Does this course help me to develop skills such as team-working, IT skills, making presentations and writing reports?

MATHS at UNIVERSITY

... at a glance



Getting into university to study maths

Questions you should ask

What A level results do I need?

You do not need to be a genius to study maths at university, you don't need a brilliant A level Maths grade, although a high grade will widen your choice of university. Further Maths is recommended by some universities.

Do I need to study Further Maths?

No, although Further Maths topics are directly relevant to the maths you will study at university. That is why students with a qualification in Further Maths may find their first year at university much easier and may progress better.

I do not have an A level in Maths, can I still study maths at university?

Yes. Universities will often accept mature students without a Maths A level, although they will usually require you to do a course equivalent to A level before you start a degree.

Can I take a gap year before studying maths?

Yes, however you may find you forget some of your A level Maths. A little revision should quickly compensate for this.

Do I need to take STEP/AEA to study maths at university?

A very small number of universities may ask you to take a Sixth Term Exam Paper (STEP) or Advanced Extension Award (AEA) as part of their conditional offer.



Choosing a University

Can I study maths with another subject?

Yes. Many universities offer courses which combine maths with another subject, e.g. finance, business, physics, computing or economics.

Are all maths degrees the same?

No. There is a nationally agreed standard for a maths degree but it only specifies two topics which every course must contain so there is plenty of scope for universities to offer very different things. Even with the same outline syllabus,

universities can approach topics in very different ways.

Which maths degree is the best for me?

It depends on what interests you, your views on class sizes and the level of support you might get, whether you want a wide choice of topics or to combine studying maths with another subject, and what you want to do after university.

Questions you should ask

- Is the course very theoretical and abstract, or mainly practical and applied?
- Does the course contain a work experience placement?
- How much choice do I get about the topics I study?

Mathematics at University

What is meant by 'pure' and 'applied' maths at university?

Pure Maths is the study of mathematical ideas and structures for their own sake often guided by elegance and interest only. Applied Maths looks at ways that maths can be applied to real life through studying practical problems. Most universities offer courses in Pure Maths, Applied Maths and Statistics and you are likely to study all of these in your first year.

People's Comments

"The problem-solving logic and computing skills developed while studying maths at university are highly sought after by many employers and, as a result, studying maths opens up a wide variety of career opportunities" (Victoria, 22, graduate, MMath).

How will I be assessed?

At some universities almost all your assessment will be through exams whereas, at others, there can be substantial credit given to coursework.

What support is there available to me?

Special sessions with students from higher years, small tutorial groups, drop-in sessions with lecturers, online forum, email, etc.

What will I study?

This depends entirely on the university, with only two subjects being compulsory in every course.

How is technology used?

For a maths course you might be expected to develop specialist skills, such as programming and using computer algebra systems.

Questions you should ask

- What is the course attitude to the use of technology within maths?
- How many hours a week of teaching will I get?
- What support is available?
- How much is assessed through exams and how much through coursework?
- Will I get the opportunity to do an individual project in the final years?