

# MSc Mathematics and its applications

School of Mathematics, Statistics and Actuarial Science

[www.kent.ac.uk/ims/maths](http://www.kent.ac.uk/ims/maths)

University of  
**Kent**

# MSc Mathematics and its applications\*

The University of Kent has developed an MSc for graduates seeking to increase their knowledge, skills and creativity in applicable mathematics. If you love mathematics, want to learn more and would like to know about the wider relevance and application of what you are learning, then this MSc is for you.

The Mathematics group at the University of Kent, based in Canterbury, is highly qualified to lead your advanced study in mathematics. Indeed, in the last Research Assessment Exercise, 95% of mathematics research submitted was rated at International Quality or above. From internationally renowned researchers to up-and-coming research stars, the staff all have a strong commitment to student achievement and to developing students' creativity.

## Course content

The MSc consists of the core module in Mathematical Inquiry and Communication, six taught modules (from a list of options), and a final Dissertation.

## Core module

Mathematical Inquiry and Communication involves an open-ended investigative project to develop your initiative and creativity. Activities to enhance your technical communication skills including public speaking, graphic design of posters and mathematical typesetting will also be included.

## Taught modules

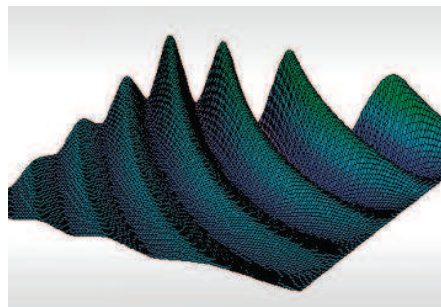
These are topics based and delve into modern mathematical thinking involving the areas of geometry, analysis and algebra and their applications. Each year at least six of the following will be offered:

- Geometric numerical integration
- Nonlinear waves and solitons
- Symmetries, groups and invariants
- Asymptotics and perturbation methods
- Quantum physics
- Applied differential geometry
- Applied algebraic topology
- Nonlinear analysis and optimisation
- Algebraic curves in nature
- Functional analysis
- Mathematics and music
- Lie groups and algebras
- Poisson algebras and combinatorics.

Some honours level modules may also be taken.

## Dissertation

An independent, in-depth study of an advanced topic of mathematics or mathematical application carried out with guidance and supervision.



## Who should apply?

The programme has been designed for graduates seeking to enhance their employability (or thinking of doing a PhD but wanting an extra year) and for teachers of mathematics in schools who wish to develop their mathematical knowledge, communication and project design skills. Mathematics graduates enjoy a wide range of careers in many science and engineering based industries, as well as in banking and finance. Many employers take the view that if you have good mathematical skills, "they can teach you the rest".

## Entry requirements

Applicants must have a 2(ii) or better Bachelor degree in Mathematics from an accredited UK institution or equivalent. There is an English language requirement for international students.

## Programme staff

All mathematics modules will be taught by members of the Mathematics group within the School of Mathematics, Statistics and Actuarial Science. Some optional taught modules may be offered by staff in other academic groups.

## Further information

Please contact the MSc Admissions Officer, Dr Steffen Krusch on [maths-msc@kent.ac.uk](mailto:maths-msc@kent.ac.uk) or [www.kent.ac.uk/ims/math](http://www.kent.ac.uk/ims/math)