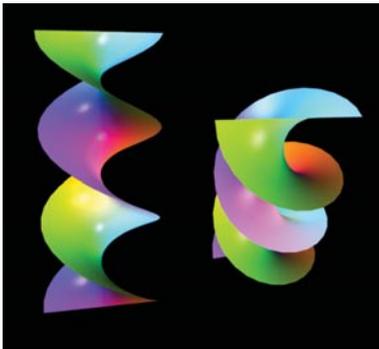


## Master of Science in Mathematics



### DURATION

**2 years (full-time), 120 ECTS**

### APPLICATION DEADLINE

**1 March** (for non-EEA citizens)

**1 June** (for EEA citizens)

### ACADEMIC CALENDAR



**1st semester:** 3rd week of September → end of January (exams in January)



**2nd semester:** 2nd week of February → July (exams in June)

[www.kuleuven.be/academiccalendar](http://www.kuleuven.be/academiccalendar)

"I am responsible for managing passive funds and mixed retail mandates (shares, obligations, property, and cash). In total, my group manages around €4 billion in assets and aims to maximise these assets using multiple quantitative techniques. A good example is the use of different mathematical optimisation techniques in minimising risk and maximising client benefit, which is defined as the trade-off between return and risk. Thorough mathematical knowledge is also indispensable in the area of derivative valuation."

(A graduate of the Master of Science in Mathematics programme, now a financial analyst at one of the major banks in Belgium)

As a mathematician, you are in absolute command of accuracy. Your analytical skills are second to none and your facility with modelling and abstraction knows no peer. Your professional versatility: outstanding. And why? KU Leuven's MSc in Mathematics programme. You'll be taught to explore mathematical and quantitative problems based on scientific analysis, to devise solutions, and to supervise their implementation. You'll learn to communicate not only with fellow mathematicians, but also with non-specialists. And your presentation skills will be sharpened to the finest point, not to mention your fluency with the modern possibilities offered by ICT. KU Leuven and its expert staff offer a research environment able to foster and nurture your talents and to polish you as a fully qualified mathematician, whether in pure or applied mathematics. And then you can explore IT, banking, or insurance sectors. Or perhaps pursue a PhD in mathematics, mathematical physics, astrophysics, engineering, or other related fields.

### A research-driven environment

All staff members of the Department of Mathematics are actively involved in the two-year Master of Science in Mathematics programme.

The academic staff at the Department of Mathematics consists of leading experts in their fields. Researchers in pure mathematics focus on algebraic geometry, group theory, differential geometry, functional analysis, and complex analysis. Researchers in mathematical statistics deal with extreme values, robust statistics, non-parametric statistics, and financial mathematics. Research in the applied mathematics group is in computational fluid dynamics and plasma-astrophysics.

### Programme

The programme of the Master of Science in Mathematics consists of 120 ECTS.

You choose one of the two profiles – Pure Mathematics or Applied Mathematics (54 ECTS) – and one of the two options – Research Option or Professional Option (30 ECTS).

The profile allows you to specialize either in pure mathematics (algebra, geometry, analysis), or in applied mathematics (statistics, computational mathematics, fluid dynamics).

There is one common course: 'Mathematics of the 21st Century' (6 ECTS).

To complete the programme, you carry out a research project that results in a master's thesis (30 ECTS).

For detailed descriptions of the courses and for the course timetable, please consult [www.kuleuven.be/ma/mmathl/programme](http://www.kuleuven.be/ma/mmathl/programme).

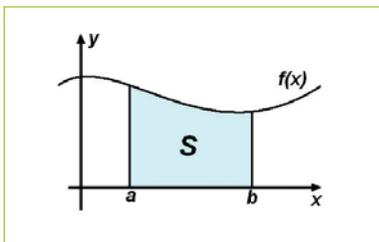
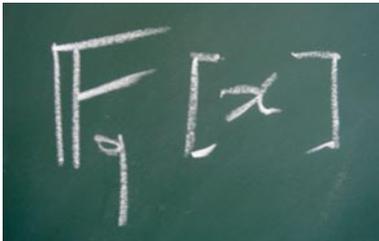
### Admission requirements

To be eligible for the Master of Science in Mathematics, you must have obtained a bachelor's degree in the field of mathematics. You also have to provide evidence of your English proficiency.

Good knowledge of the English language is essential. Unless you are of Anglo-Saxon origin, you will be asked to submit a TOEFL or IELTS certificate. If you have already completed an English-language programme at an Anglo-Saxon university, your degree will be considered sufficient proof of your English proficiency.

Programme admission: [www.kuleuven.be/ma/mmathl](http://www.kuleuven.be/ma/mmathl)

General admission: [www.kuleuven.be/admissions](http://www.kuleuven.be/admissions)



## Discover KU Leuven

Founded in 1425, the University of Leuven (KU Leuven) has been a centre of learning for almost six centuries. Today, it is Belgium's largest and highest-ranked university as well as one of the oldest and most renowned universities in Europe. As a leading European research university and co-founder of the League of European Research Universities (LERU), KU Leuven offers a wide variety of programmes in English supported by high-quality interdisciplinary research.

Within the field of science, engineering, and technology, KU Leuven offers five academic educational profiles organized in five faculties: Science, Engineering Science, Bioscience Engineering, Engineering Technology, and Architecture. Boasting an outstanding central location in the heart of Europe, KU Leuven offers a truly international experience, high-quality education, world-class research and cutting-edge innovation.



KU Leuven is a founding member of  
the League of European Research Universities

## Tuition fees

The tuition fee for the 2016-2017 academic year is € 890 for all students. The tuition fee for future academic years may be higher as a result of indexation. Please consult the website for the most recent information: [www.kuleuven.be/tuitionfees](http://www.kuleuven.be/tuitionfees).



## Application procedure

KU Leuven uses an online application system. You can download and submit your application form via [www.kuleuven.be/application](http://www.kuleuven.be/application). Students with a Flemish degree can consult [www.kuleuven.be/studentenadministratie](http://www.kuleuven.be/studentenadministratie).

## Career perspectives

Mathematicians find employment in industry and in the banking, insurance, and IT sectors. Many graduates from the research option pursue a career in research and start a PhD in mathematics, mathematical physics, astrophysics, engineering, or related fields.

Contact:

[www.kuleuven.be/ma/mmathl](http://www.kuleuven.be/ma/mmathl)