

## Applications

How to apply? visit [www.master-photonics.org](http://www.master-photonics.org)  
Application deadline for non-EU students: January 05  
Application deadline for EU students: May 05

## Admission Criteria

The minimum graduate admission requirements are:

1. A bachelor's degree or recognized equivalent from an accredited institution (minimum 3 years full time study or 180 ECTS credits) in Electrical Engineering, Applied Physics, Physics, Materials Science or a related discipline.
2. Strong English language ability. Candidates who are not native English speakers or have never studied in an English-taught programme before must prove their knowledge of English with a certificate.

## Scholarships

### For non-EU students:

Erasmus Mundus scholarships available for 4 semesters and amounts to 24000€ per year in order to cover all tuition fees and living expenses.

### For EU students:

Limited Erasmus Mundus scholarships available for 4 semesters and amounts to 10000€ per year in order to cover all tuition fees and living expenses.

Other types of grants also available for EU-students.

## Tuition Fees

The tuition fee of the Erasmus Mundus Master of Science in Photonics amounts to:

- 7000€ per year for non-EU students
- 2000€ per year for EU students



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# Erasmus Mundus MSc in Photonics



**5** leading research and educational institutions in Europe are collaborating to offer a joint Erasmus Mundus Master of Science programme in Photonics, providing a top-quality education in all aspects of photonics.

The master programme has a duration of two years (120 credits), with students spending a year in two different countries.



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**Full scholarships available for non-EU students**

**Limited scholarships available for EU students**

**[www.master-photonics.org](http://www.master-photonics.org)**

## Erasmus Mundus MSc in Photonics

The Master of Science programme in Photonics is a multidisciplinary programme covering basic physics, material technologies, electronics and applications in different fields. Students will be trained to become specialists in the field. In addition, students will be brought in contact with European culture and languages and will get the chance to live in several European cities (Brussels, Edinburgh, Ghent, Saint-Andrews and Stockholm) with a long and still visible history.

The research activities of the five involved universities cover nearly all relevant fundamental research (e.g. nano- and micro-photonic components in silicon, III-V semiconductors and polymers, femtosecond lasers) and applications (e.g. optical sensing, data and telecommunications, quantum cryptography, displays).

The partners of the Erasmus Mundus MSc in Photonics:



**Ghent University**  
Ghent, Belgium



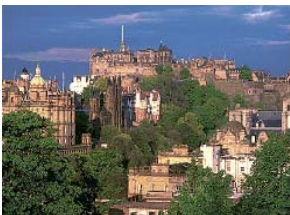
**Vrije Universiteit Brussel**  
Brussels, Belgium



**Royal Institute of Technology**  
Stockholm, Sweden



**University of St Andrews**  
Saint-Andrews, United Kingdom

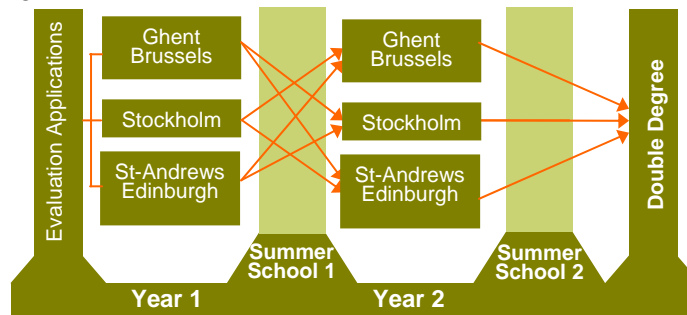


**Heriot-Watt University**  
Edinburgh, United Kingdom

## Programme Structure

The Erasmus Mundus MSc programme in Photonics is a 2-year (120 credits) fully English-taught programme, with the students spending one year in one country and the other year in another country. The first year is mainly devoted to a programme of core photonics courses with essentially the same content at all institutes, complemented by a number of advanced photonics courses as well as a number of multidisciplinary courses. In the second year the students move to another location where they continue to take advanced photonics courses and multidisciplinary courses and where they do their master thesis in a field of their interest. The choice of second year location is mainly the result of the particular research interests of the student. Indeed, the 5 different universities offer thesis work in different particular sub-fields of photonics.

The mobility scheme is schematically represented in the figure below.



At the end of each academic year all students join together for a summer school with lectures by leading experts in the field.

First Master Year	Second Master Year
Core Photonics Courses (36)	Master Thesis (30)
Advanced Photonics Courses (24)	
Multidisciplinary Courses (15)	
Transferable Skills (12)	
Summer School (3)	
<b>120 credits in total</b>	

## Photonics

Photonics is now widely recognized as a major innovation enabling discipline for the 21st century. It can be defined as that field of science and technology where the fundamental properties of light and its interaction with matter are studied and applied.



Since several decades photonics has been penetrating in ever more applications and household appliances. At present, photonics is a discipline of key importance in industrial sectors such as tele- and data communication, display and camera industry, biotechnology, solar energy, medical instrumentation, laser material processing, etc.

## Degree

The qualification obtained is a **double degree** awarded by the two countries in which the student has studied.

- In Belgium, Ghent University and the Vrije Universiteit Brussel jointly award the degree of **Erasmus Mundus Master of Science in Photonics**.
- In the U.K., the University of St Andrews and Heriot-Watt University also award the degree of **Erasmus Mundus Masters of Science in Photonics**.
- In Sweden, the Royal Institute of Technology of Stockholm awards the Degree of **Master of Science (Two Years) with a major in Photonics**.



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