

Single-Subject Bachelor

Dual-Subject Bachelor

**Master Degree** ◀

Master of Education

PhD

### ► General information

**Start:** Winter semester  
**Duration:** 3 semesters  
**Degree:** Master of Science

### ► Application and enrolment

#### Admission requirements

The minimum entry requirements are a Bachelor of Science (or equivalent) of a high standard, in a Natural Science, Mathematics or Engineering subject which is worth 210 ECTS credit points. The study programme is completely in English and requires sufficient knowledge of the English language at level B2.

For further information regarding admission requirements (e.g. language requirements) and the admission application, please refer to the Admission Regulations.

#### Application

Candidates have to apply online, between January and April, for admission in September/October of the same year. The application has to be submitted via the central European website of the study programme. More information here: [www.master.eurec.be/en/How-to-Apply/Overview/](http://www.master.eurec.be/en/How-to-Apply/Overview/)

### ► Your contact persons

#### For enquiries regarding the degree programme/subject

Academic Counselling

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#### General advice regarding studies

Study and Career Counselling Service - Zentrale Studien- und Karriereberatung

StudierendenServiceCenter  
Campus Haarentor A12  
26129 Oldenburg  
0441-798-2728  
[studium@uol.de](mailto:studium@uol.de)  
[www.uol.de/en/students/service-advice](http://www.uol.de/en/students/service-advice)

#### Application procedures / Entry requirements

Nathalie Richet – Master programme manager EUREC  
[www.master.eurec.be/en/About-the-Master/Contact-us/](http://www.master.eurec.be/en/About-the-Master/Contact-us/)

### ► Further Information

#### Homepage European Master in Renewable Energy

[www.uol.de/en/eurec/](http://www.uol.de/en/eurec/)  
[www.master.eurec.be](http://www.master.eurec.be)

#### Courses of Study

[www.uol.de/en/students/degree-programmes](http://www.uol.de/en/students/degree-programmes)

#### Funding

[www.uol.de/studium/finanzierung](http://www.uol.de/studium/finanzierung)

#### Imprint

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## European Master in Renewable Energy (M.Sc.)

Single-Subject Bachelor

Dual-Subject Bachelor

**Master Degree** ◀

Master of Education

PhD

# European Master in Renewable Energy

(M.Sc.)

The aim of the European Master in Renewable Energy is to train students to fill the gap between the growing industry demand for specialised Renewable Energy expertise and the skills available in the job market. This 3 semester Master of Science addresses students with a degree in a Natural Science, Mathematics or Engineering subject of at least 210 ECTS credit points. The course has been set up to deliver a master programme that deals with basic research in renewable energy enabling young graduates to continue with either a research or an industry-oriented career.

Over the course of this programme students will obtain a broad overview on the relevant Renewable Energy technologies and specialize in one of the fields: Photovoltaics, Wind Energy, Grid Integration, Solar Thermal, Ocean Energy or Sustainable Fuel Systems for Mobility.

The European Master is coordinated by EUREC the leading association representing a research and development network of 45 research institutions and university departments active in the area of renewable energy.

The Master program is run by a consortium of 9 European Universities leading in renewable energy R&D. Those universities offer either the basic educational CORE semester or the SPECIALISATION semester. To ensure the European dimension of the Master programme, students must study in at least two different countries. The university of Oldenburg as one of five CORE providers is responsible for the first semester. You will be enrolled in the respective CORE university which will also award the degree.

After completing the programme, the students will have a critical understanding of the role of Renewable Energy technologies in a climate and resource constrained energy sector and gain the technical knowledge on various renewable energy technologies. This covers the evaluation of the resource, principles of the conversion process, choice of materials, design of systems, performance of systems in operation as well as the use of models and tools for simulation and sizing. Students acquire a critical understanding of the principles of the socio-economic evaluation of Renewable Energy technologies and of the role of regulatory policy frameworks in the context of Renewable Energy. They have skills in analytical and research methodology,

including a reflective and critical approach, relevant for Renewable Energy.

During the programme, students acquire the capacity to apply scientific knowledge to a professional situation, as a reflective practitioner, the capacity to work in a multicultural and multidisciplinary team as well as the capacity to communicate information in a clear and structured way in both oral and written format.

Some of the future areas of activity include research, planning and development, participation in regional and international development organisations and processing of interdisciplinary topics on the sustainability of future energy supply systems.

The European Master in Renewable Energy is accredited by the ASIIN agency ([www.asiin.de](http://www.asiin.de)) which guarantees the international recognition of the degree.

## ► Programme structure and content

The 15-month programme is divided into three semesters.

During the CORE semester, students acquire a solid foundation in key renewable energy technologies and the socio-economic issues surrounding their deployment. The CORE semester in Oldenburg is taught entirely in English and consists of the modules Fundamentals for Renewable Energy (6 KP), Physical Principles of Renewable Energy Converters (6 KP), Energy Resources and Systems (6 ECTS) and Renewable Energy Technologies (12 ECTS). The courses in these modules contain lectures, seminars and practical laboratory work.

The SPECIALISATION semester focuses on one particular technology. In-depth theory classes alternate with practical work in laboratories and technical visits. The following specialisations are electable:

- Photovoltaics (University of Northumbria, Newcastle, United Kingdom)
- Wind Energy (National Technical University, Athens, Greece)
- Grid Integration (University of Zaragoza, Spain)
- Solar Thermal (University of Perpignan, France)
- Ocean Energy (IST Lisbon, Portugal)
- Sustainable Fuel Systems for Mobility (Hanze University of Applied Sciences, Groningen, Netherlands)

For more information on the specialisations such as the detailed curriculum visit [www.master.eurec.be](http://www.master.eurec.be)

For the last six months, upon completion of the specialisation, students gain practical experience through a MASTER THESIS project undertaken in a company or a research centre. In December, each student comes to Brussels to present the results of the six-month project.

## ► Careers and areas of employment

Graduates of the European Master in Renewable Energy are qualified for employment in various fields of the Renewable Energy sector. With their high level technical and scientific competences, they are employed in the industrial sector as well as research centres and are qualified to proceed with a doctorate research period. Graduates are mostly employed in the private sector as engineers, but many also find work as consultants or researchers, or for governments or NGOs in international development cooperation.