



# KIC InnoEnergy Master School

## MSc RENE – RENEWABLE ENERGY

**MSc RENE develops engineering students' skills in research, innovation, entrepreneurship and leadership, enabling you to meet key challenges and goals in renewable energy. With this know-how, you can better understand the world's energy challenges and speed the transition to a low-carbon economy.**

### PROGRAMME DESCRIPTION

MSc RENE prepares you for advanced research, innovation and management careers in renewable energy. It trains the researchers, engineers and entrepreneurs who will design and implement future energy policies and introduce new services and products for energy providers, major manufacturers, business start-ups and public organizations worldwide.

The programme provides you with a holistic understanding of the sustainable energy field. You gain state-of-the-art knowledge and expertise in fundamental renewable energy disciplines covering the entire value chain from power generation (solar photovoltaic, concentrated solar power, hydropower, wind energy) to storage and transmission (energy vectors, grid integration). It is ideal for top-performing students with entrepreneurial and innovative talent who want to meet renewable

energy challenges and contribute to achieving the objectives of the European Strategic Energy Technologies (SET) Plan.

MSc RENE is a joint programme offered in collaboration with leading technical universities and a business school:

- Instituto Superior Técnico de Lisboa (IST), Portugal
- Royal Institute of Technology (KTH), Sweden
- École Polytechnique (ParisTech), France
- Universitat Politècnica de Catalunya (UPC), Spain
- ESADE Business School (ESADE), Spain

### PROGRAMME CONTENT

Mobility is a key part of the KIC InnoEnergy educational and innovation strategy. As an MSc RENE student, you spend your first study year at one of the partner universities. This first year includes engineering courses in advanced technology concepts and methods, as well as in sustainable energy production and utilisation. Project courses are introduced from the start to offer advanced training in problem solving and group dynamics for mastering complex energy systems analyses.

Your second year is devoted to your individual specialisation. Topics include:

- Hydropower, offshore wind power and ocean energy (IST)
- Polygeneration (KTH)
- Solar photovoltaic, grid engineering, hydropower, wind power and energy vectors (ParisTech)
- Solar energy (PV and CSP) and grid engineering (UPC)

Leading industrial partners include ABB, Alstom Wind, EDF, EdP, Gas Natural Fenosa, Iberdrola, Saint Gobain, Schneider Electric and TOTAL. ESADE Business School holds the entrepreneurship training and organizes the Management and Entrepreneurship Summer School.

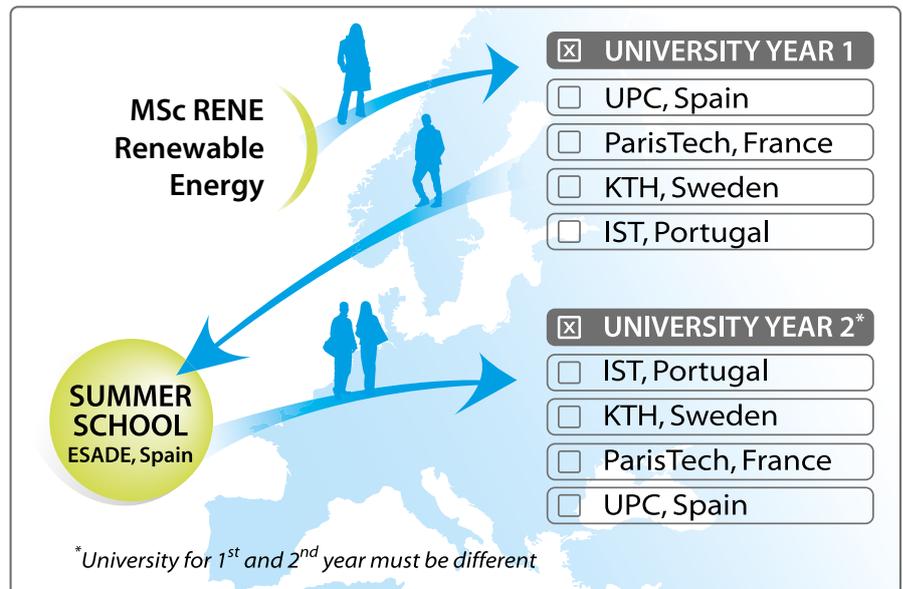
### THESIS PROJECT

Your second year also includes a thesis done via an internship with one of the industrial partners in renewable energy. This final degree project thesis, worth 30 higher education credits (ECTS), should be aligned with renewable energy research and technology projects in KIC InnoEnergy. It is co-advised by a professor of the hosting university and a researcher in industry and/or a research centre.

## CAREER OPPORTUNITIES

As an MSc RENE graduate, you are highly eligible for many career paths in renewable energy. You are employable within a wide range of industries and are well equipped to start your own innovative business or provide strong leadership in many areas of the renewable energy sector.

Thanks to the strong partnership between universities, innovation centres and energy companies, you can pursue many opportunities; advanced research and innovation, industrial management, and designing and implementing strategic energy policies for the public and private sector.



## APPLICATION PERIODS

Application Round 1  
January 2nd - February 28th, 2014  
Application Round 2  
March 1 - April 30, 2014

## REQUIREMENTS

MSc RENE master programme is for outstanding students with an above-average Bachelor's degree in Mechanical Engineering, Electrical Engineering or Chemical Engineering. Admission of students with a different background in a related field may be possible after careful assessment. To qualify for RENE, applicants need to fulfil the admission requirements related to previous studies.

## ENGLISH PROFICIENCY

All applicants must provide proof of their English language proficiency, which is most commonly established through an internationally recognised test such as TOEFL, IELTS or University of Cambridge/ University of Oxford Certificates

Detailed information on the application procedure and requirements can be found on our website:

[www.kic-innoenergy.com/application](http://www.kic-innoenergy.com/application)

## CONDITIONAL ACCEPTANCE

Students in their final year of undergraduate education may also apply and if qualified, receive a conditional offer. If you have not completed your studies, please include a written statement from the degree administration office (or equivalent department), confirming that you are enrolled on the final year of your education and giving your expected completion date. If you receive a conditional offer, you should present your degree certificate to the KIC InnoEnergy Admissions Office before your admission in a specific programme can be formalized. The KIC InnoEnergy Admission Office will forward this to your programme, and appointed Year 1 university, such that your admission can be completed.

## PARTICIPATION FEES AND SCHOLARSHIPS

See info on website.

## ACCREDITATION

Having successfully completed the programme (120 ECTS), you will be awarded the Master of Science (M.Sc.) as a double-degree of the two universities you have attended.

## CONTACT

MSc RENE Programme Director:  
Associate Professor Enrique Velo  
e-mail: [rene@kic-innoenergy.com](mailto:rene@kic-innoenergy.com)

UPC-ETSEIB International Office:  
Tel: (+34) 934 016 627  
e-mail: [masters.etsuib@upc.edu](mailto:masters.etsuib@upc.edu)

For more information:  
[www.kic-innoenergy.com/rene](http://www.kic-innoenergy.com/rene)

