



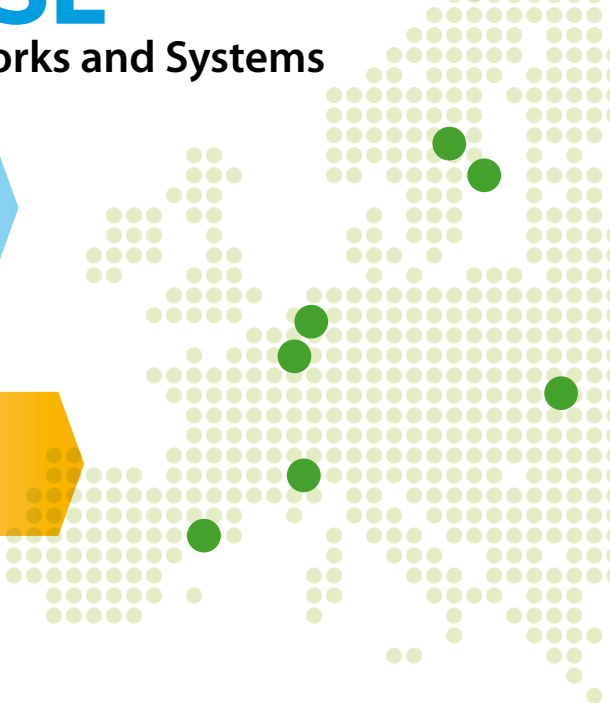
# MSc SENSE

Smart Electrical Networks and Systems

Specialisation in  
smart grids

Industry involvement

Two summer schools





**MSc SENSE** develops your skills in electrical power engineering, innovation processes and entrepreneurship in the emerging field of Smart Grids. Its industry involvement gives students a broad industrial network plus the ability to combine engineering and entrepreneurship and develop their ability to analyse possibilities and risks from both a technical and business perspective. MSc SENSE focuses on understanding, modelling and analysing the principles behind electric power generation, transmission, distribution and utilisation on a broad scale.

### Specialisation in smart grids

The programme gives you a highly relevant and advanced education within the smart grid concept – the electrical power system of the future. MSc SENSE focuses on understanding, modelling and analysing the principles behind electric power generation, transmission, distribution and utilisation on a broad scale.



### Industry involvement

Industry involvement is seen in activities such as study visits, guest lectures and training in industry. Our students will be trained in analyzing and taking new ideas and concepts from a technical concept towards a market product. MSc SENSE students will also be trained to communicate and interact with industry.



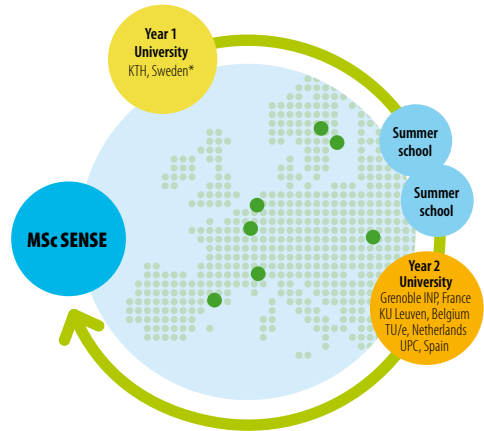
### Two summer schools

Two summer schools are arranged between your first and second year: one focused on smart grid innovations and another on entrepreneurship and business creation.



## Second year specialisations

- Energy Management in Buildings and Power Grids (INP)
- Power Distribution and Storage (KU Leuven)
- Power Electronics as Enabling Technology for Renewable Integration (UPC)
- Sustainable Electrical Energy Systems (TU/e)



\*Two courses given by UU and AGH

## Role of industry partners

ABB, Vattenfall and IREC have been active in the curriculum design, selection process, teaching, internship and job opportunities. All three have indicated a strong future need of competence in the field of smart grids.



## Added value activities

**Summer schools** – You will have a one month summer school with ESADE in Barcelona on Business & Entrepreneurship.

**Training in industry** – In-place training in cooperation with ABB and Vattenfall. This gives our students commercial understanding and insights in industry related cutting edge research laying the foundation for future products on the energy market.

**Guest lectures from the industry** – Regular guest lectures in all modules by leading industry experts give our students a true insight in industrial thinking and future development of smart grids and energy storage.



# KIC InnoEnergy Master School



*University of Science and  
Technology, Poland*



*ESADE Business School,  
Spain*



*Grenoble Institute of  
Technology, France*



*KTH Royal Institute of  
Technology, Sweden*



*University of Leuven,  
Belgium*



*Eindhoven University of  
Technology, Netherlands*



*Universitat Politècnica de  
Catalunya, Spain*



*Uppsala University,  
Sweden*

## Application details

### Programme specific requirements.

A completed Bachelor's degree in Electrical Engineering or a highly related field, such as physical engineering, mechanical engineering or any energy related engineering.

The average grade must be at least 75% of the scale maximum.

At least 60 ECTS (within the Bachelor's degree) in the area of electrical engineering.

At least 30 ECTS (within the Bachelor's degree) in mathematics (including calculus, numerical methods, algebra, probability theory and basic control theory).

### Accreditation

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

## Find out more on our website

Application dates and student testimonials

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



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KIC InnoEnergy is supported by the EIT,  
a body of the European Union