

KIC InnoEnergy Master School MSc ENERGY FOR SMART CITIES

MSc ENERGY FOR SMART CITIES is customdeveloped for internationally-oriented engineering students who wish to implement modern energy technologies and entrepreneurial activities in the smart city environment. The programme is truly multi-disciplinary; as a graduate, you will be well qualified to work in industry or research, or to take on policy-making roles in energy issues related to secure, sustainable urban living and working.

PROGRAMME DESCRIPTION

MSc ENERGY FOR SMART CITIES balances exciting technological opportunities in energy with environmental and socio-economic aspects of smart cities, such as energy efficiency in buildings, electric transportation, energy economics, smart lighting and other city services. You receive a broad background in electrical and mechanical energy systems, allowing you to participate fully in the design and operation of advanced energy solutions. You also learn how to construct and employ contemporary energy conversion technologies and secure energy supply in general, while taking into account overriding technical limitations, environmental consequences and economic considerations.

The programme is taught by academic staff at renowned partner universities as well as

by members of the private sector, industry, municipalities, etc. Research assignments are conducted with the participation of the private sector and in association with KIC InnoEnergy innovation projects.

MSc ENERGY FOR SMART CITIES is a joint programme run by six European universities involved in the framework of KIC InnoEnergy:

- University of Leuven (KU Leuven), Belgium and Eindhoven University of Technology (TU/e), the Netherlands
- Royal Institute of Technology (KTH), Stockholm
- Institut National des Sciences Appliquées (INSA), Lyon and Grenoble Institute of Technology (INP), France
- Universitat Politècnica de Catalunya (UPC), Spain

PROGRAMME CONTENT

MSc Energy for Smart Cities is ideal for graduates who are fascinated by energy technology and interested in environmental and socio-economic factors, as well as the electrical and thermo-mechanical aspects. This master programme focuses on end-users of the electrical value chain; the citizen, the company or the city.

During your first year, electrical and mechanical engineering courses are combined with general socio-economic, but still energy-related, subjects. An integrated project is also included.

Your second year continues with a Master's thesis and some elective courses, both general, broadening and option specific.

MSc Energy for Smart Cities also organises a summer school to sharpen participants' entrepreneurial skills in the energy sector. It includes soft skills such as team-building, networking, leadership, entrepreneurship and intercultural communication skills, all fuelled by interesting conversations with professionals from the energy industry, consultancy firms and municipalities.

THESIS PROJECT

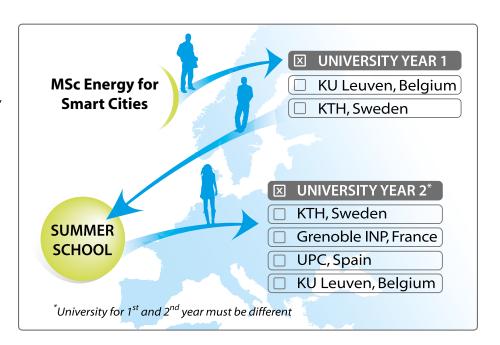
The Master thesis is a second-year research project on electrical or thermo-mechanical energy, or on one of energy's technical-economic aspects. Here you learn to integrate and apply the knowledge and skills acquired in your previous year. Topics are linked with ongoing KIC InnoEnergy research and innovation activities. Project findings will be investigated with a view to optimising their value and application in both current and coming energy contexts.

CAREER OPPORTUNITIES

After completing MSc Energy for Smart Cities, you will be equipped to work with different stakeholders in the energy and smart city domain: industry, network operators, regulators, developers and government. Research, design, operational and management careers are within the possibilities. With the programme's built-in entrepreneurial background, starting your own company is also an option.

Opportunities include:

- Transmission system operators
- Distribution system operators
- · Electricity suppliers
- Chemical companies
- Technology research institutes
- Technical competence centres
- International energy and services businesses
- · Infrastructure and cities



APPLICATION PERIODS

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

REQUIREMENTS

MSc Energy for Smart Cities 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 ENERGY FOR SMART CITIES, 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

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

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For more information: www.kic-innoenergy.com/ energyforsmartcities

