Erasmus Mundus Joint Master



Dynamics of Renewables-based Power Systems

UNIVERSITAT POLITÈCNICA

DE CATALUNYA



master-dream.ec-nantes.fr

Hochschule für Technik



What is an **Erasmus Mundus Joint Master** (EMJM)?

An EMJM is a prestigious, integrated, international study programme, jointly delivered by an international consortium of higher education institutions and other partners with specific expertise and interest in the study programme.

What does an EMJM bring to your career plans?

mobility in at least 2 countries, language courses, courses fully taught in English

benefit from the attractiveness of the label of excellence on the job market

Co-funded by

the European Union

strong alumni network, partnership with industry and labs The European Master in Dynamics of Renewables-based Power Systems (DREAM) is an innovative 2-year Master's programme that offers multidisciplinary education in the modern power systems field of today and tomorrow.

It trains students to tackle the current and future challenges of smart power systems in a new way. Therefore, core knowledge from the fields of Power Systems, Smart Grids, Renewable Generation, Automatic Control and Power Electronics is combined to give the students the opportunity to acquire a global "system view" of the dynamics of next generation power systems.

DREAM promotes a more integrated way of thinking in order to prepare multidisciplinary specialists trained for the new jobs and challenges of future power systems.

Consortium

The DREAM master's programme has been selected under the European Programmes of Excellence in 2021 through the Erasmus+ 2021-27 key action 2.

DREAM is jointly implemented and fully supported by 4 major European Higher Education Institutions (HEI):

- École Centrale de Nantes (ECN), France
- Universitat Politècnica de Catalunya (UPC), Spain
- Hochschule für Technik und Wirtschaft (HTW), Germany
- I Universitatea Nationala de Stiinta si Tehnologie Politehnica Bucuresti (UNSTPB), Romania

Depending on each student's mobility, a double or triple degree will be awarded:

- Master in Automatic, Robotics (ECN)
- Master in Energy Engineering (UPC)
- Master in Electrical Engineering (HTW)

Master in Monitoring and control of electrical power systems (UNSTPB)







Mobility path and programme

The programme of study lasts for two academic years split into four semesters. DREAM student mobility paths will take place in a minimum of 2 EU countries, and possibly in 3 EU countries.

The Master's Thesis in Semester 4 can take place in any of the partners or associate HEI partners or in industry.

Mobility scheme



DREAM students and alumni will benefit from a worldwide network of 22 prestigious universities, companies and R&D centres in the academic and industrial sectors.

With the combined knowledge of the Master and their internship experience, the DREAM graduates will have **excellent career prospects**, in companies acting for energy transition as well as in research.

DREAM at a glance

2 academic years

Fully taught in English

Access to cutting-edge platforms in the power systems field

European mobility: First semester in France, second semester in Spain or Germany, third semester in any of the four institutions.



ADMISSION CRITERIA

This 2-year Master in modern power systems is open to students from all over the world who already hold a first university degree with the equivalent of 180 ECTS credits, after at least three years studies at the level of Bachelor of Science, in a field related to:

- I Electrical engineering
- I Electronic engineering
- I Energy engineering
- Automatic control
- I Renewable energy engineering
- I Applied mathematics and physics

LANGUAGE

Fully taught in English -Official English test result required (except for native-English speakers)

TUITION FEES

EU students: €4,500 / year Non-EU students: €9,000 / year

SCHOLARSHIPS

Scholarships available for students from all over the world with a focus on Western Balkan countries (visit our DREAM website).

INTAKE & APPLICATION DEADLINES

One intake per year starting early September. Apply by end of January for a scholarship. The application deadline for self-funded students is end of April (partner & programme countries).



More information: https://master-dream.ec-nantes.fr/ e-mail: <u>dream@ec-nantes.fr</u> Facebook: <u>https://www.facebook.com/DREAMmundus</u> Linkedin: https://fr.linkedin.com/company/dream-european-master