DC MAPS

ERASMUS MUNDUS JOINT MASTER · FIRST INTAKE 2027

Engineer the power systems that run on direct current.

A two-year master's in HVDC transmission and converter-based power systems, taught across four European technical universities.

DELIVERED BY FOUR LEADING EUROPEAN UNIVERSITIES

KU LEUVEN

UPC UNIVERSITAT POLITÈCNICA DE CATALUNYA BARCELONATECH

DTU

KTH VETENSKAP OCH KONST

www.dcmaps.eu

WHY DCMAPS

One master's, the whole conversion chain

Power electronics and power systems, taught together, the way HVDC links and converter-based grids are actually built.

Study in three countries

Move between partner universities each semester and finish with a degree recognised by all of them.

From semiconductor to system

Converter topologies, control, protection and grid integration, in one curriculum instead of four.

Taught by active research groups

Lecturers work on live HVDC and power electronics projects with transmission operators and manufacturers.

A thesis with industry

Write your thesis at a partner university or with a company in the energy sector.

Fully funded places

Erasmus Mundus scholarships cover participation costs and a monthly allowance for the best-ranked applicants.

A field that is hiring

Europe plans to multiply its offshore and cross-border HVDC capacity this decade, and needs engineers to build it.

PROGRAMME STRUCTURE

Four semesters, four stations

Every student follows the same path through the first two semesters, then chooses a specialisation for the third.



SEMESTER 1

Foundations

KU Leuven, Leuven

Power system analysis, power electronics, HVDC fundamentals



SEMESTER 2

Converter technology

UPC, Barcelona

Converter control, grid-forming operation, modular multilevel converters



SEMESTER 3

Specialisation

DTU, Kongens Lyngby or KTH, Stockholm

DC grids and offshore wind at DTU, or HV components and DC protection at KTH



SEMESTER 4

Master's thesis

Any partner or industry

Research thesis with a partner university or company

Example structure. Course titles and credits will be confirmed.

THE UNIVERSITIES

Delivered by four leading European universities

KU Leuven

Leuven, Belgium

Power system foundations and HVDC grid modelling.

Universitat Politècnica de Catalunya

Barcelona, Spain

Converter control, grid-forming operation and modular multilevel converters.

Technical University of Denmark

Kongens Lyngby, Denmark

Offshore wind integration and multi-terminal DC grids.

KTH Royal Institute of Technology

Stockholm, Sweden

High-voltage components, DC protection and breakers.

ADMISSION

Who it's for

- hold a bachelor's degree in electrical, electronic or energy engineering, or a closely related field
- have a solid grounding in circuit theory, electrical machines, control and mathematics
- want a career in the design or operation of transmission grids, converters or renewable energy systems
- are ready to live and study in three countries in two years

FEES AND SCHOLARSHIPS

Erasmus Mundus scholarships cover your studies

The best-ranked applicants receive a scholarship for the full two years. Self-funded places are also available.

MONTHLY ALLOWANCE TBC

€1,400

For up to 24 months

PARTICIPATION COSTS TBC

Covered

Tuition, insurance and fees for scholarship holders

SELF-FUNDED FEE TBC

€4,500 / year

For EU and associated countries; €9,000 for other countries

KEY DATES

The 2027 intake

01 NOV — **Register your interest** TBC
1 Nov 2026 · Leave your email and we'll send you the call when it opens.

01 DEC — **Applications open** TBC
1 Dec 2026 · Apply through the application form on this website.

15 JAN — **Deadline for scholarship applicants** TBC
15 Jan 2027 · Applicants who want an Erasmus Mundus scholarship must apply by this date.

31 MAR — **Selection results** TBC
31 Mar 2027 · Every applicant receives a decision by email.

30 APR — **Deadline for self-funded applicants** TBC
30 Apr 2027

01 SEPT — **Programme starts** TBC
1 Sept 2027 · Semester 1 begins at KU Leuven.

APPLYING

How to apply

1. **Check you're eligible**
   Read the entry requirements and the English language requirements.
2. **Prepare your documents**
   Collect the documents you'll need as PDF files.
3. **Fill in the form**
   Send your details and documents through the form at www.dcmaps.eu/apply.
4. **Wait for the results**
   The selection committee reviews every application. You'll hear from us by email.

Hear first when applications open

Register your interest at www.dcmaps.eu/apply and we'll send you the call and the deadlines as soon as they're confirmed.

www.dcmaps.eu
info@dcmaps.eu

TBC: to be confirmed. Dates, fees and the degree title may still change; www.dcmaps.eu always has the latest information.

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