

E2SD Electrical Energy for Sustainable Development

MASTER FLUIDS ET ENERGY SYSTEMS

Campus of Lille



OBJECTIFS

The objectives of this one-year program are to provide students with a deeper understanding of the electrical renewable energy, and the challenges to integrate them in the future electric distribution systems. The content of the master is therefore to give to the student the essential tools to address the current issues, and the knowledge of the state of the art research in the field in order to:

- Improve the efficiency of electrical systems for a more rational use of energy resources
- Increase the part of renewable energy by improving their integration in the distribution grid
- Design optimized control of energy sources in autonomous electrical vehicles.

PUBLICS

- M2 Arts et Métiers Engineers
- M2 International Students

CAREERS

- Public and private research
- R&D engineers or consultant for companies in the field of electrical, mechatronic and electrical transportation domain

PROCEDURE

Opening procedure march
dead-line end of june

KEY STRENGTHS

- Training by the L2EP lab internationally recognized in electrical Engineering
- Leading industrial partners in Electrical Engineering
- 100 % employability rate
- Two technological plateformes to support training
- Lectures in english

PREREQUISITE

- M1 or equivalent international level (selection according to application file)
- B2 level or TOEIC score >750 in English
- B1 Level in French recommended

PARTNERS

Academic partners:

Lille University, Ecole Centrale de Lille, Akron University, Aalto University, Harbin University, Saïtama University, London Imperial College, McGill University

Industrial partners:

RTE, ERDF, VALEO, Schneider Electric, CNES

Institutional partners:

Pôle MEDEE, Réseau MEGEVH, Institut VEDECOM

COST OF TRAINING

243 € normal rate, Social security costs can be added

PROGRAMM

Full-time training in two main sessions:

Teaching language: English

ECTS credits: 60

From September to April (courses 250h, 25 ECTS) :

- English Communication or FLE 50h 5 ECTS
- Energy Conversion 50h 5 ECTS
- Electromagnetic conversion and eco design 50h 5 ECTS
- Elective module* 50h 5 ECTS
- Bibliography Project 50h 5 ECTS
- Sustainable Development Application 50h 5 ECTS

**The elective modules are as follows:*

- Electrical systems and renewable production*
- Electrical systems for future transportation*

From April to July or September:

- Scientific project 10 ECTS
- Master thesis Internship 20 ECTS

CALENDAR

From April to July or September

CONTACT

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Pour candidater en ligne,
rendez-vous sur :
www.artsetmetiers.fr/fr/formation/admissions