

Assistant Professor: «Advanced data-based / data-driven control for Energy transition.»

CDI de droit public

Context

CentraleSupélec is a public scientific, cultural, and professional institution (EPSCP in French) under the authority of the French ministers for higher education and industry. Its primary missions are to train engineers of a high scientific level, conduct research in engineering and systems sciences, and provide executive education. As part of its development, CentraleSupélec will open a permanent contract under public law, attached to the Rennes campus, and will conduct its research at the IETR Laboratory (UMR CNRS 6164).

CentraleSupélec's Rennes campus offers the CentraleSupélec general engineering curriculum, which includes a first year under apprenticeship status and three final-year specializations, including one titled SES (Sustainable Energy Systems), in line with this job profile. It also operates four specialty engineering programs, including one in Electrical Engineering: Energy and Systems (egES).

The IETR Laboratory (Institut d'Electronique et des Technologies du numéRiques) is organized around six Departments, including the Energy Intelligence Department, where the recruited person will conduct their research. The department's Automation team aims to develop algorithmic solutions for controlling and analyzing large-scale systems, leveraging their natural structure. These solutions should facilitate the implementation of the energy transition.

Education task

The workload associated with the position corresponds to a statutory teaching service: 192 hours per year. Teaching activities will cover a broad spectrum of subjects:

- Students in the "Electrical engineering: Energy and Systems (egES)" engineering program over the 3 years of the program.
- Students in the General Engineering program, in particular:
 - In the first year of the apprenticeship program
 - In the third year of the 'Sustainable Energy Systems' specialization.

These activities will take the following forms:

- Initial training: actively supervising laboratory work and projects, supervising tutorials, courses, and student support (internships, gap year, sandwich courses, etc.).

Campus de Paris-Saclay (siège)
Plateau de Moulon
3 rue Joliot-Curie
F-91192 Gif-sur-Yvette Cedex
Tél : +33 (0)1 75 31 60 00
SIRET : 130 020 761 00016

Campus de Metz
Metz Technopôle
2 rue Edouard Belin
F-57070 Metz
Tél : +33 (0)3 87 76 47 47
Fax : +33 (0)3 87 76 47 00
SIRET : 130 020 761 00040

Campus de Rennes
Avenue de la Boulaie
C.S. 47601
F-35576 Cesson-Sévigné Cedex
Tél : +33 (0)2 99 84 45 00
Fax : +33 (0)2 99 84 45 99
SIRET : 130 020 761 00032

- Continuing education: tutorials or specialized courses on specific subjects.

The course topics include automation, mathematics, optimization, data science, and, more broadly, understanding the challenges associated with the energy transition. The person recruited must be able to teach in English.

The person recruited must be open-minded and willing to contribute to various teaching teams. This person will be expected to make proposals for the improvement and development of curricula addressing the challenges of climate, energy, and ecological transitions, as well as those of sovereignty, under the responsibility of the Academic Department and the various program managers.

Research mission

Research activities will be carried out within the Automatic research team (<https://www.ietr.fr/equipe-aut-automatic-control>) of the IETR (Institut d'Electronique et des Technologies du numÉrique), a joint research unit of CentraleSupélec, CNRS, Université de Rennes, Université de Nantes, ENS Rennes, and INSA Rennes.

The Automatics team develops high-performance, safe control solutions to facilitate the energy transition. It aims to contribute to the deployment of Smart Grids and the massive integration of renewable energy sources, as well as to enhance the energy performance of systems. It also contributes to a more theoretical focus on adaptive and data-driven control.

The research activities associated with this position will focus on strengthening the team's work on advanced data-oriented control techniques, including learning-based, data-driven, and data-based approaches, to facilitate implementation and enhance the performance of energy management systems.

Candidate profile

The person recruited must have a thesis in automatic control with contributions to data-driven control methods, preferably for energy applications. They must have authored or co-authored publications in international journals (the publication requirement will depend on the curriculum vitae and number of years of experience). In addition, the person recruited must have a taste for teaching and research (both academic and contractual with industry). Last but not least, this person must be committed to supervising research aligned with the themes of the laboratory's Automation team.

Selection procedure

File in PDF format, including:

Campus de Paris-Saclay (siège)
Plateau de Moulon
3 rue Joliot-Curie
F-91192 Gif-sur-Yvette Cedex
Tél : +33 (0)1 75 31 60 00
SIRET : 130 020 761 00016

Campus de Metz
Metz Technopôle
2 rue Edouard Belin
F-57070 Metz
Tél : +33 (0)3 87 76 47 47
Fax : +33 (0)3 87 76 47 00
SIRET : 130 020 761 00040

Campus de Rennes
Avenue de la Boulaie
C.S. 47601
F-35576 Cesson-Sévigné Cedex
Tél : +33 (0)2 99 84 45 00
Fax : +33 (0)2 99 84 45 99
SIRET : 130 020 761 00032

- A cover letter;
- A detailed CV (teaching experience, research, mobility, publications, etc.);
- A research and teaching project fitting within CentraleSupélec (approximately 5-10 pages);
- A copy of the identity card or passport;
- A copy of the doctoral degree and any document attesting to research supervision experience;
- And any documents that attest to experience;
- Optional letters of recommendation;
- Thesis defense report.

must be sent by email only to the contact below before April 6th, 2026 at the latest: Human resources

department: drh.pole-enseignant@centralesupelec.fr quoting reference 2604-MCF-CDI-Transition énergétique

- **Recruitment interview:**

For the candidates selected for the audition, the audition will take place in three stages:

- A presentation of the candidate's background, teaching, and research project;
- An illustration of a lesson in English on a problem whose subject is identical for all candidates will be specified on the invitation.
- An exchange with the members of the committee.

The duration of the three presentations will be specified in the audition invitations.

Scientific contacts:

- Romain Bourdais, head of IETR's Automatic Control team, romain.bourdais@centralesupelec.fr
- Hervé Guéguen, Head of the "Sustainable Energy Systems" specialization and the "Systems Science for Sustainable Energy" specialization course, herve.gueguen@centralesupelec.fr
- Yves Louet, Director of CentraleSupélec's Rennes campus, yves.louet@centralesupelec.fr



Campus de Paris-Saclay (siège)
Plateau de Moulon
3 rue Joliot-Curie
F-91192 Gif-sur-Yvette Cedex
Tél : +33 (0)1 75 31 60 00
SIRET : 130 020 761 00016

Campus de Metz
Metz Technopôle
2 rue Edouard Belin
F-57070 Metz
Tél : +33 (0)3 87 76 47 47
Fax : +33 (0)3 87 76 47 00
SIRET : 130 020 761 00040

Campus de Rennes
Avenue de la Boulaie
C.S. 47601
F-35576 Cesson-Sévigné Cedex
Tél : +33 (0)2 99 84 45 00
Fax : +33 (0)2 99 84 45 99
SIRET : 130 020 761 00032