Grenoble INP - UGA is a member of **international** engineering and management education and research **networks.** It is widely recognized in national and international rankings**.**

8 schools + **39** laboratories

8 300 students

1 300 teaching, research, administrative and technical staff

Grenoble INP-UGA is a renowned public institution of higher education and research, and a major player in the Grenoble ecosystem. It is the engineering and management institute of Grenoble Alpes University, and plays a leading role in the scientific and industrial community.

University lecturer Position

Short profile	Modeling and optimization of efficient and resilient electrical systems
Body	University Lecturer
Position number	63 MCF 0412
CNU Section	63
Location	Grenoble
Date of recruitment	01/09/2023
Key words	Modeling, optimization, electrical components and systems, energy efficiency, resilience, digital simulation

Grenoble INP - UGA is a leading public institution accredited with the French label "Initiative d'excellence". It offers innovative engineering and management programs, with an increasing internationalization of its course offers. The courses are grounded in sound scientific knowledge and linked to digital, industrial, organizational, environmental and energy transitions. The Engineering and Management Institute of Grenoble Alpes brings together more than 1300 staff members (teacher-researchers, lecturers, administrative and technical staff) and 8300 students, located on 8 sites (Grenoble INP - Ense3, Grenoble INP - Ensimag, Grenoble INP - Esisar, Grenoble INP - Génie industriel GI, Grenoble INP - Pagora, Grenoble INP - Phelma, Polytech Grenoble, Grenoble IAE and the INP Prepa). Grenoble INP is also a highly-ranked institution of higher education and research, leading the way in the fields of engineering and management on an international scale. It is a member of a large number of international academic and research networks. It is part of the European University UNITE!.

As part of Grenoble Alpes University, Grenoble INP has associated guardianship of 39 national and international research laboratories and of technological platforms. The research conducted there benefits both its socio-economic partners and its students. Grenoble INP is at the heart of the following scientific fields: physics, energy, mechanics and materials; digital; micronanoelectronics, embedded systems; industry of the future, production systems, environment; management and business sciences.

Grenoble INP - UGA is s an equal opportunity employer committed to sustainability. Grenoble INP-UGA celebrates diversity and equity and is committed to creating an inclusive environment for all employees. All qualified applications will be considered without discrimination of any kind.

Teaching

In addition to the job profile set out below, the candidate must have a strong interest in teaching and research in order to be able to implement training through research in a higher education institution.

School: Grenoble INP - Ense3

School website: http://ense3.grenoble-inp.fr/

Contacts: delphine.riu@grenoble-inp.fr

Grenoble INP - Ense3 is a school that provides learning to more than 1,200 students and work-study students each year to offer them training leading to the title of engineer, master or specialized master, in order to meet the challenges of the economic and societal world in the field of energy transition, resource management and sustainable innovation around energy and water uses.

Teaching profile:

In order to contribute to the electrification of uses and the decarbonization of energy production means, the teacher recruited must have very good skills in electrical engineering and particularly in modeling, simulation or optimization of electrical components or systems. He or she will thus be involved in the first-year electrical engineering courses of the core curriculum (electronics, electromechanical conversion, electrical systems and networks, power electronics), but will also be part of the teaching teams of the Electrical Energy Engineering, Electrical Energy and Power and/or Energy Systems and Markets courses, in initial or continuing education.

The person recruited will also participate in the evolution of the school's experimental platforms in order to offer original practical courses (TP or BE) in order to reinforce the digital dimension of electrical engineering and to promote training through research.

The recruited lecturer will contribute to the evolution of the training programs within the framework of a vast reform underway in order to respond to the evolution of the professions and technical skills of an engineer in the face of current socio-ecological issues. The application must therefore include a proposal for a teaching syllabus for the "design of an electrical component or system" in relation to these issues for the 2nd year of the Electrical Energy Engineering program.

The application must also present a project for how they see themselves fit, more globally, into the school.

In terms of cross-disciplinary skills, the person recruited must have a good command of the English language, as the school has a strong international and intercultural dimension. He or she must also be able to take on responsibilities within the school in the medium term, whether to coordinate teaching teams or to get involved in the school's promotional projects, in France or abroad.

Research

Team : MAGE (Models, Methods and Methodologies Applied to Electrical Engineering)

Laboratory website: http://www.g2elab.grenoble-inp.fr/

Contacts : Nouredine.Hadjsaid@grenoble-inp.fr

The G2Elab covers a wide spectrum of skills in the field of Electrical Engineering Research. Its activities can be summarized under the following key words: electrical energy, materials, processes and innovative systems, modeling and design.

The resreacg conducted ranges from basic "upstream" research to the "downstream" field with a strong involvement in collaborations with players in the socio-economic sector. With more than 100 permanent staff, 110 PhD students and 50 masters students, G2Elab is a major player in these fields at national and international level.

Research profile:

The successful candidate will reinforce the MAGE team on the theme of models and methods applied to electrical energy systems. The candidate should have skills in modeling and/or simulation and/or optimization in one of the laboratory's application areas related to the energy transition (buildings, networks, mobility). The scientific issues concerned are the modeling, design, and management of these energy systems with innovative approaches to improve their efficiency, sustainability and resilience. Strategies combining expertise (physical and professional) with field data are avenues to be explored.

The application should also include a proposal on how the candidate will fit into the laboratory.

Position assigned to a restricted area: YES

(Protection of the nation's scientific and technical potential, conditioning the appointment of the lecturer-researcher on the authorization of the Defense Security Officer).

Specific requirements and conditions

Administrative activities related to the duties of a lecturer: the lecturer will be in charge of a teaching unit, stream or year.

How to apply

Applicants must submit their applications on the Galaxie Platform of the French Ministry of Higher Education and Research from the 23rd of February 2023, 10 a.m. (Paris time) to the 30th of March 2023, 4 p.m. (Paris time), deadline.

Any document sent outside the Galaxie procedure will not be taken into account.

The interview will include simulation/situational exercises. The details will be communicated when the invitation is sent out. In addition, part of the interview may be conducted in English.