



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.**

## Professor

Research field	Computer engineering, automation and signal processing
Category / Requested profile	Professor
Ministerial reference for the position	
CNU Section	61
Location	Saint Martin d'Hères
Date of recruitment	01/09/2025 (DD/MM/YYYY)
Position key words	

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 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

**School :** Grenoble INP – Ense3, Génie Industriel, Phelma, Polytech

**Schools websites :**

<https://ense3.grenoble-inp.fr/>

<https://genie-industriel.grenoble-inp.fr/>

<https://phelma.grenoble-inp.fr/>

<https://polytech.grenoble-inp.fr/>

**Teaching profile:**

The recruited Professor recruited will be involved in teaching in one or more areas of Section 61, Computer Engineering (Real Time, Architecture, Networks), Automatics (Continuous and Discrete Automatics, Robotics, Industrial Engineering) and Signal Processing (Signal, Image, Vision, Information, Artificial Intelligence, Data Science) –

see (<https://conseil-national-des-universites.fr/cnu/#/entite/entiteName/CNU/idChild/33>)

He or she will be involved in the initial student training cycle or in the work/study training program of the engineering curriculum of one of the four Grenoble INP - UGA schools (Ense3, Genie Industriel, Phelma or Polytech). The proposed training modules will have to fit into the training program of the targeted school considering the prerequisites and drawing on the teaching resources available within Grenoble INP - UGA.

In addition, he or she will contribute to Grenoble INP - UGA's discussions on teaching socio-ecological transitions, and more generally on the challenges of transforming engineering and management professions. He or she will be expected to take on responsibilities such as directing teaching programs and training projects, engage in various missions linked to the institution's development at national and international levels, and participate in the development of partnerships with socio-economic players.

# Research

**Team :** GIPSA-LAB, TIMA, GSCOP, TIMC

**Host laboratories websites :**

<https://www.gipsa-lab.grenoble-inp.fr/>

<https://tima.univ-grenoble-alpes.fr/>

<https://g-scop.grenoble-inp.fr/>

<https://www.timc.fr/>

**Research profile:**

The successful candidate will help to promote, lead and represent his/her research activities in one of the activities in one of the four laboratories listed above. In addition to a scientific profile of excellence, the candidate will be involved in large-scale scientific projects with local and/or international socio-economic partners.

**GIPSA-Lab laboratory:**

GIPSA-lab is a multi-disciplinary laboratory at the interface between the human, physical and digital worlds. Using measurements, data and observations from physical, physiological and cognitive systems, our research aims to design high-performance, robust and resilient methodologies and algorithms for signal processing and information extraction, decision-making, observation, control and communication. Our work draws on mathematical and computational theories to develop models and algorithms, validated by hardware and software implementations.

With this recruitment, GIPSA-lab wishes to strengthen its core fields of signal processing, image processing and system control. Target application areas include energy systems, natural systems, robotic systems and human signal processing.

**TIMA Laboratory:**

The miniaturization of CMOS devices and the emergence of new technologies are amplifying design challenges in microelectronics. These circuits have applications in the fields of health, transport safety and energy, imposing specific constraints such as power consumption, safety and security. Research activities at TIMA focus on integrated circuit design and verification techniques to improve quality, testability, reliability, safety and low power consumption.

The recruited candidate should have research experience in one or more of the following areas: system-on-chip architectures, formal methods, circuit and system design that exploits new techniques oriented towards energy efficiency, dependability (fault detection/tolerance, on-line and off-line testing, self-adaptive circuits, aging), hardware security.

**GSCOP Laboratory:**

Production systems are undergoing radical change, particularly with the growing development of AI, and with ever-more pressing challenges to meet environmental challenges. The G-SCOP laboratory is a multi-disciplinary facility designed to meet the scientific challenges posed by current and future changes in the industrial world. The laboratory's scope ranges from product design to the management of production systems, drawing on strong skills in optimization.

The candidate candidate will have strong research experience in one of the following fields: digital solutions, AI for the industry of the future, modeling, simulation and digital twins for optimization and operational safety of production systems, sustainable supply chain, circular economy for a sustainable industry. He or She will be responsible for defining and leading the scientific strategy to develop one of these themes.

**TIMC Laboratory:**

An interdisciplinary unit in the field of Bio-Technologies for Health, TIMC imagines and designs new devices for tomorrow's 4P medicine (personalized, preventive, predictive, participative).

From the identification of medical needs and uses, to physiological interpretation and diagnostic assistance, the various links in the chain are at the heart of the innovation process, and in particular the processing of acquired signals to extract characteristics of interest.

The candidate recruited should have an integrative vision of all the components involved, both technological (electronics, signal processing) and medical (physiology, uses, regulatory and protocol aspects). He or she should also be able to lead the development stages leading to device branding and industrialization.

**Position assigned to a restricted area: YES** (Protection device for the nation's scientific and technical potential, requiring the authorization of the Security and Defense Official for the appointment of teaching and research staff).

## Specific requirements or conditions

Administrative activities related to the functions of Professor: responsibilities for teaching units, academic programs, or specific academic years.

In the context of research, excellence, and increasing internationalization, the quality of candidates' research activities must be demonstrated through recent publications in the leading international journals or conferences in their field.

Other criteria that will guide the evaluation process: a pro-active approach to science and open data, supervision of research activities (including doctorate and post-doctorate), contractual and commercial activities (patents, software registrations, industrial or operational applications, etc.), coordination of an international (H2020, ERC, etc.), national (ANR, FUI, etc.) or regional scientific project, scientific leadership (including team leadership, program leadership, etc.), coordination of an international (H2020, ERC...), national (ANR, FUI...) or regional scientific project, scientific leadership (including leadership of a team, program or international network...), development of major partnerships with local and/or international socio-economic players, investment in value-adding activities, scientific outreach (member of learned societies, member of editorial committees, member of scientific committees of institutions, symposia, etc.), organization of symposia, dissemination of scientific knowledge, development of links with civil society.

## How to apply

Applications must be submitted via the Odyssee platform of the French Ministry of Higher Education and Research, between Friday March 14th 2025, 10am (Paris time) and Monday April 14th 2025, 4pm (Paris time), deadline.

Any document sent outside the Odyssee application will not be taken into account.

When candidates are interviewed by the selection committee, they will be asked to take part in a pedagogical work experience, the details of which will be communicated when the invitation is sent out.

Please note that part of the audition may also be carried out in English.