

Institute of Engineering and Management of Grenoble Alpes University



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 + 38 laboratories HR EXCEL

8 350 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 profile field	System design for industry 5.0
Requested job profile	Professor
Ministerial reference for the position	60 PR 0568
CNU Section	60
Job location	Grenoble (Ecole de Génie Industriel, G-SCOP laboratory)
Hiring date	01/09/2024 (DD/MM/YY)
keywords	Engineering Design

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 8 350 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 38 national and international research laboratories and of technological platforms. The research conducted there benefits both its socioeconomic 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 - Génie industriel

School website: https://genie-industriel.grenoble-inp.fr

Contact: frederic.noel@grenoble-inp.fr, Directeur de Grenoble-INP Génie industriel

School presentation:

Grenoble INP-Industrial Engineering trains industrial engineering engineers and executives for the design and management of supply chains and products for all sectors of the economy. By combining skills in engineering sciences, data sciences and human and social sciences, the School of Industrial Engineering trains talents who master the fundamentals of sciences for industry, with general skills allowing them to transform industry in the interest of society.

Teaching Profile:

Candidates must demonstrate an interest in multidisciplinarity, industrial engineering and the industry of the future in its global and integrated vision. The teaching is based on the school's pedagogical project: a systemic and multidisciplinary vision of the company and of training, and a pedagogy in which the student is a player. A strong environmental awareness is also expected in the teaching.

The Professor will teach systems design as part of initial training in Industrial Engineering at Bachelor's and Master's level, as well as continuing education. He or she will be able to teach methods as well as technology and science.

The aim is to coordinate teaching on systems design, integrating digital technologies and human resources. New teaching approaches, including the use of digital twins for example, will be appreciated. The candidate should also be involved in project-based teaching, as well as in the management of engineering or innovation projects.

He or she will also be able to develop teaching in the field of the industry of the future and approaches to Industry 5.0. He or she should be familiar with project-based teaching approaches. He or she will quickly be called upon to take on teaching responsibilities within the school. He or she will be open to innovative teaching techniques and will be able to teach remotely. He or she will contribute to the deployment of technological platforms and digital platforms and take advantage of the opportunities offered by these platforms in teaching and research. Some of the teaching may be in English.

Research

Laboratory: Laboratoire G-SCOP (UMR 5272 Grenoble-INP, UGA et CNRS)

Teams: COSYS ou CCI ou CIPP

Laboratory website: https://g-scop.grenoble-inp.fr/

Contact: Peggy.Zwolinski@grenoble-inp.fr, Head of G-SCOP Laboratory

G-SCOP is a multidisciplinary laboratory designed to address the scientific challenges posed by the ongoing and future transformations of the industrial world. The scope of the laboratory ranges from product design to the management of production systems, leveraging strong expertise in optimisation. G-SCOP is a leading laboratory in France in the field of production systems (the only CNRS UMR focused on production systems; tasked by the ANR to lead the

discussion on future production systems...), and it also holds international recognition through its research networks (CIRP, Design Society...) and research projects related to Industry 5.0 and industrial renewal at the European level.

The G-SCOP laboratory's design teams are recognised for their expertise in collaborative design and product lifecycle engineering. Their aim is not only to design and develop solutions, but also to propose design and organisation methods that enable us to understand and support changes in industry and emerging technologies, leading to new forms of consumption and production.

Research profile

Our society is changing, and we need to support transitions and transformations in industry.

In this context, the G-SCOP laboratory is recognized for its work in integrated design of products, services and systems. The G-SCOP laboratory's approach is clearly in line with the Industry 5.0 orientation: the systems designed are regenerative, human-centered, resilient and implement the right technologies.

New technologies and their methods of use are now available (Augmented Reality, Virtual Reality, Artificial Intelligence, Cybersecurity, Additive Manufacturing, personalization tools, Cobotics equipment, social and environmental impact tools, etc.) and enable the development of systems by companies of all sizes, and even for individuals. The multiplicity of these new technologies and the associated constraints generate complexity in product and process design. Developments around the concept of the digital twin, for example, would seem to be a good way of tackling this complexity.

G-SCOP is looking for a professor to reinforce its international visibility as the French leader in the field of integrated design, and to help remove the scientific barriers to Industry 5.0. This professor will develop the themes he or she considers most interesting for himself or herself, industry and society; this will enable him or her to be integrated into one of the G-SCOP laboratory's Design Engineering teams.

The G-SCOP laboratory provides the "Operations management (OM)" technology platform for industrial organization and work environments, the "Vision'R" and "FabAdd" technology platforms for XR and "prototyping and additive manufacturing". It will be appreciated if the new hired professor proposes to work with the S.mart technology center, which hosts these technology platforms. The candidate should also demonstrate a good understanding of industrial issues.

The role of the professor will be to define the scientific strategy for overcoming the challenges outlined above, working with colleagues in the laboratory who are already working on this theme. Involvement in setting up national and European projects, and active involvement in national and international networks, are strongly expected.

The research activity presented in the application must be proven, in particular by international publications.

Specific requirements

Candidates recruited as Associate professors are likely to take on collective responsibilities such as being in charge of a teaching unit, a teaching programme or an entire year of study.

How to apply

Applicants must submit their applications on the Galaxie Platform of the French Ministry of Higher Education and Research from the 22nd of February 2024, 10 a.m. (Paris time zone) to the 29th of March 2024, 4 p.m. (Paris time zone), 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 carried out in English.