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	**Industrial engineering, production systems**
Body	University Lecturer
Position number	61 MCF 0643
CNU Section	61
Location	Grenoble
Date of recruitment	01/09/2023
Key words	Industrialization; internal logistics; communicating workshops; dynamic management of production systems

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

School : Grenoble INP - Industrial Engineering

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

Contact : gulgun.alpan@grenoble-inp.fr

Grenoble INP-Industrial Engineering provides learnings to engineers and managers in industrial engineering 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 provides learning to talented individuals who can master the fundamentals of science for industry, with general skills that enable them to transform industry for the good of society.

Teaching Profile:

With the advent of Industry 4.0 and the transition to increasingly digitized companies, it has become essential for an industrial engineer to be able to fully take into account the knowledge contained in the available data in order to make the right decisions in increasingly complex systems. The fourth industrial revolution relies on many intelligent and connected technologies. A major challenge is to successfully integrate them into industrial workshops, taking into consideration the human being who will be in permanent contact with these technologies, and societal issues such as sustainable development.

In this context, we wish to reinforce our training offer around the design and management of the workshops of the future, where humans collaborate with machines. These new workshops and their workstations must be more efficient, agile, robust, sustainable and resilient.

The candidate will have to master the tools of production management, industrialization, workshop sizing, by mobilizing new knowledge related to new technologies making the equipment more flexible and communicating. He/she will seize the opportunities offered by the site's technological platforms ("Operations Management" platform) to develop new courses that meet the expectations for this position.

The lecturer recruited for this position will reinforce the teams working in the fields of physical flow management, design and management of logistics chains. He/she will be able to intervene in basic industrial engineering courses (production management, system design, discrete event models, automation,...).

 Some of these courses may be taught in English.

Research

Team : G-SCOP Laboratory (UMR 5272 Grenoble-INP, UGA and CNRS)

GCSP team (Management and Control of Production Systems)

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

Contact : Pierre.David@grenoble-inp.fr

The G-SCOP laboratory (UMR 5272) is a multidisciplinary research laboratory that deals with the issues of design, optimization and management of products and production systems. The G-SCOP laboratory aims at developing research to meet the societal challenges of the four transitions: energy, environment, digital and industrial. The mutation of the industrial world linked to the concepts of the industry of the future (personalization, connectivity, agility, sustainability...) calls for the evolution of the methods of design and management of production systems. In such a context, production systems, thought for mass production, are moving towards an agile production, sometimes circular, adapted to the demand and available resources.

Research profile:

Numerous tools have been developed to assist in the design of industrial production systems. Some are based on simulation, others on optimization models or decision support systems. They address the analysis of production systems or supply chains, and they focus on the analysis of performance in its various aspects (operational excellence, reliability, energy efficiency...).

The Industry 4.0 context induces new elements to be taken into account in the design and control tools to imagine production systems becoming more flexible, reconfigurable and scalable. It is crucial to take advantage of the new communication capacities between system components, and the possibility of decentralizing the decision-making inherent in production. Putting the human at the heart of the system and imagining and designing the new important place for humans in the system is a challenge to be met.

For this, new paradigms of modeling, analysis and decision making must be imagined. These new concepts will be used for the design or operational management of production systems. They will have to allow the analysis of more dynamic systems, with distributed intelligence and making the most of available technologies to serve humans and a sustainable industry.

The candidate must have an expertise in the issues related to the industrial production systems of the future. He/she will be interested in the representation and control of industrial systems or services implementing connectivity technologies, Artificial Intelligence or advanced robotics. The candidate should also take interest in conducting physical experiments.

Position assigned in a restricted area: YES/<u>NO</u>

(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 or conditions

None.

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.