

Match of the vacancy within the Strategic Goals of the Department

Global Strategic Goals of the Faculty of Engineering and Architecture at Ghent University

New members of the Professorial Staff (i.e. Assistant Professors, Associate Professors, Full Professors and Senior Full Professors) are expected to develop (research) activities aimed at engineering applications or architecture and to join, as far as is possible, existing research groups rather than to separately create (very) small new and isolated research groups.

The research activities within the Faculty of Engineering and Architecture are only partially realized by employees that are funded directly by the government (Professorial Staff, Assisting Academic Personnel, and Administrative & Technical Personnel) or through research funds provided by the university itself. Indeed, a considerable share of research activities within the Faculty of Engineering and Architecture is realized by researchers that are funded through external national/Flemish or international resources (e.g., FWO-Flanders/Research Foundation-Flanders, VLAIO-Flanders/Flanders Innovation & Entrepreneurship, EU, contract research in cooperation with companies). While the latter concerns external funding, the research activities are in fact managed by internal Professorial Staff members that succeed in acquiring external funding based on their expertise and experience.

If the Faculty of Engineering and Architecture wants to safeguard its competitive position (internationally and nationally), it will continuously have to succeed in acquiring the necessary external funding. It is therefore the Faculty's strategy to preferably create vacancies in domains in which chances are high that such external funding can be acquired. This aspect is explicitly considered during the appointment procedure of Professorial Staff members within the Faculty of Engineering and Architecture.

Strategic Goals of the Department - match with the vacancy

The department of Industrial Systems Engineering and Product Design (EA18) of the Faculty of Engineering and Architecture (FEA) of Ghent University (UGent), is active in the fields of Industrial Systems Engineering, Operations Research and Industrial Design. Its research is structured around three research groups: "Industrial Systems Engineering" (ISyE), "Design Nexus" (design.nexus) and a multidisciplinary research center "Media, Innovation and Communication Technologies" (Imec-Mict). The ISyE research group is also affiliated with the strategic research center Flanders Make through its core lab. To strengthen the ISyE research group, the department seeks candidates for a part-time Assistant Professor position in the area of "Human-Centered Manufacturing" to start in September 2025. Candidates with a strong background and proven research record, based on peer-reviewed international publications in the area of human-centered manufacturing, more specifically on research related to cognitive support for production employees in the make industry or in closely related areas are strongly encouraged to apply.

The ISyE research group has a strong expertise in the field of Manufacturing Knowledge and Automation Engineering, with main application in the make industry. Considering the increasing importance and shifting role of human capital within the industrial context, the objective of this position is to enhance the existing expertise of the ISyE research group with expertise in support and training strategies for various production employee profiles (e.g. quality engineer, maintenance engineer, automation engineer, scheduler, methods and process engineer) on different human factors (from cognition to ergonomics, safety and well-being). Research topics are encouraged towards (1) development of novel cost-efficient and personalised digital support/training tools and approaches for a resilient workforce; and (2) Industry 5.0 compliant human-robot interaction and task allocation strategies towards fully hybrid assembly workplaces and systems. The selected candidate will be expected to assume a leadership role in this research track within the ISyE research group. This will entail defining, coordinating, and supervising a number of Master's and Ph.D. theses, as well as preparing research proposals for submission to funding bodies.

In addition to its research activities, the ISyE research group is also engaged in teaching and educational outreach. ISyE members are responsible for a number of courses offered within the Master of Science in Engineering Technology in Machine and Production Automation and the postgraduate and Advanced Master Smart Operations and Maintenance in Industry. It is expected that the selected candidate will contribute to these teaching activities. In particular, she/he will assume teaching responsibilities for the courses "Factories of the Future" and "Human-Centered Manufacturing," which are offered to Engineering Technology students on the UGent campus in Kortrijk.

Furthermore, the selected candidate will be entrusted with a range of organizational and logistical responsibilities within the department or faculty, in collaboration with their colleagues. The department's principal service activities entail the cultivation of relationships with external entities, including companies and their professional associations, through the implementation of collaborative projects and the delivery of specialized courses. Such opportunities may arise in the form of research contracts or thesis subjects for master's students. It is anticipated that the candidate will participate in these activities, although with moderation during the initial period.