

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), at Ghent University (UGent) is active in two multi-disciplinary domains of 'Industrial Systems Engineering and Operations Research' and 'Industrial Design Engineering' respectively. To strengthen its team engaged in Industrial Design Engineering education and research at the research group 'design.nexus', the department seeks candidates for a tenure-track assistant-professor position in the domain of 'Product-Systems Design for industry 5.0' to start in February 2027. The position will be based in Campus Kortrijk of UGent. Candidates with a strong background and a proven research record in the domain of Product-Systems Design for Industry 5.0, based on peer-reviewed international publications, are strongly encouraged to apply.

The research group 'design.nexus' is the reference and flagship expertise center regarding product-systems design and development at Ghent University. The full cyclic design life cycle of a product and its embedded systems is covered from front-end innovation to realization. As central focus, design.nexus wants to realize bridges between the design discipline and upcoming research fields such as emerging technology, societal challenges, sustainable development goals and the transformation towards Industry 5.0. Design.nexus co-creates and implements interdisciplinary design strategies in the domains of the Make Industry, Circular Design and Health Care.

The department wishes to strengthen the expertise of its design.nexus research unit, especially in the domain of Product-Systems Design for Industry 5.0. This domain is rooted in product design but focuses explicitly on the specific challenges and values of Industry 5.0. Industry 5.0 builds on the possibilities of Industry 4.0, complemented by a strong focus on human-centered design, sustainability and resilience. It is thus expected that the selected candidate will conduct research in this domain.

The selected candidate is also expected to teach, depending on her/his expertise, courses in the domain of computational design strategies and digital production, implement human (operator) centered product realization strategies, engineering and construction design and IoT through theory, practice and project courses both BSc and MSc programs of Industrial Design Engineering Technology. The candidate is also expected to define, coordinate and supervise several PhD and master student theses. In addition, he/she will take some organizational and logistical tasks in the department or faculty, in consultation with colleagues. Service activities of the department consist primarily in developing relationships with enterprises or their professional associations mainly through projects and specialized courses. This provides opportunities for research contracts and thesis subjects for master students. The candidate will be expected to participate in these activities albeit with moderation in the first years.