



HEC Liège is looking for a full-time PhD researcher in Operations Research

The Operations Department of HEC Liège (University of Liège) is looking for a **PhD researcher in Management Sciences, with a specialization in Operations Research** (optimization, algorithmics, artificial intelligence).

The topic of the PhD is the development of mathematical optimization methods for wood reuse:

The increasing demand for materials such as wood undeniably contributes to the depletion of natural resources and global warming. In order to counteract this phenomenon, a more sustainable and circular management of wood could be developed by efficiently recycling our wood waste. The main goal of the proposed research is to develop a set of combinatorial optimization methods capable of generating, based on a set of recovered wood slats, layout schemes of these slats leading to the largest possible number of recomposed panels usable in the construction field. Since the quantities of wood slats are unlikely to be accurately predictable, the research will focus on the design of methods that take uncertainty into account when generating the layout schemes, and that are able to propose new schemes once the actual data are available.

Job description : The appointee is expected to

- Carry out research work leading to a doctoral thesis in management sciences, with a specialization in operations research at HEC Liège under the supervision of Prof. Célia Paquay;
- Complete the doctoral training successfully <u>http://www.edtgestion.hec.ulg.ac.be</u>
- Be involved in the scientific activities of the research team QuantOM within the strategic field "Business analytics and Supply chain management" (e.g., participation in seminars and international conferences) <u>http://www.quantom.hec.ulg.ac.be/</u> and https://www.hec.uliege.be/cms/c_8321276/en/hec-business-analytics-supply-chain-management

Your profile :

- You have an engineering degree in management sciences or applied sciences or a master's degree in mathematics, physics, computer science, or industrial engineering (120 credits) (https://www.enseignement.uliege.be/cms/c_9096635/en/doctorate);
- You are interested in fundamental and applied research questions in operations research and optimization, with a strong focus on sustainability issues;
- You have coding skills in Java, C++ or other languages;
- Languages: English (fluent spoken and written), French is not required but would facilitate the daily life in the department.

<u>Contract</u> : Full-time fellowship for a period of 4 years starting as soon as the position is filled. Monthly net salary is around $2400 \in$.

Application package:

www.hec.uliege.be





Interested candidates should send their motivation letter and curriculum vitae by email to Prof. Célia Paquay cpaquay@uliege.be.

More information about HEC Liège

HEC Liège is the Management School of the University of Liège (ULiège). The University is an active partner of a network of over 900 universities promoting the exchange of students, researchers, and skills. As one of its faculties, HEC Liège is one of the leading Belgian management schools hosting graduate and postgraduate study programmes. The School counts 110 full-time faculty members and researchers and about 3,500 students, and promotes an empowering pedagogy leading students to play a proactive part in their education. HEC Liège's commitment to and ongoing investment in quality improvement has been recognized through the international Accreditations AACSB and EQUIS (delivered by EFMD).

HEC Liège emphasizes the human dimension of its work environment, the regional anchoring of its community service missions, the managerial relevance of its teaching and its applied research projects, let alone its fruitful inter-faculty partnerships.

HEC Liège upholds respect, tolerance, congeniality, diversity, and social responsibility. It is committed to the well-being of its members and to environmental protection.

Last but not least, HEC Liège's modern and expanding campus within a city renowned for its friendliness and hospitality makes it a great place to live and work.

A description of the HEC Liège work environment can be found at : https://www.hec.uliege.be/cms/c_7098604/en/hec

HEC Liège is located in Liège, Belgium's third largest city, and the largest agglomeration of the French speaking Walloon region. At the heart of Europe, Liège is the third inland port of Europe and the seventh freight airport in Europe. Recognized for its quality of life and its rich historical heritage, Liège is ideally situated within the Meuse-Rhin Euregio, 30 km from Maastricht (the Netherlands) and 60 km from Aachen (Germany). It is less than 1.5 hours away from Cologne, 2.5 hours from Paris and 4 hours from London by high-speed train (TGV) starting from the new magnificent train station designed by the renowned architect Santiago Calatrava.