

System Engineer Innovative Electrical Systems (Leuven or Lommel)

As a system engineer and researcher, you re-design electrical systems in drivetrains and manage all energy flows in them.

Flanders Make promotes new possibilities to improve system performance with optimal energy management and new power electronics technology. For smart factories, where intelligent machines are interconnected, Flanders Make develops new high-performance power systems. For future vehicles, where electric drivetrains are the norm, Flanders Make enables state-of-the-art hardware to increase efficiency and reliability and save costs.

Improve energy performance within a system of interconnected machines

As an expert in power electronics or energy management, you:

- Work together in a research team combining expertise in power systems, power electronics, mechatronic design, communication methods, predictive control and optimisation;
- Take the lead in **redesigning** the entire **electrical system**.

For various applications (weaving loom, e-vehicle, industrial robot, smart factory...) you:

- Figure out together with the team how to effectively manage and control the energy flows;
- Optimise the total cost of ownership (reliability, efficiency, power quality...);
- Integrate out-of-the-box energy storage ideas (e.g. supercapacitors, thermal buffering, mechanical storage solutions such as springs & flywheels...);
- Create the high-level system architecture;
- Lead the integration of submodules, the dynamic modelling of power components and their controls, continuously keeping the bigger picture in mind;
- Trace new research opportunities and propose new project ideas.

Electrical System Engineer

You have

- A master's or PhD degree in Electrical Engineering, Power Systems or Energy Management;
- Preferably 5 years of experience in a research (or industrial) environment;
- Reliable expertise in energy management of machines and/or vehicles (motion systems);
- Insight into the physical dynamics of electrical systems (losses, transients);
- A broad technical interest and affinity with different aspects of automation;
- Affinity with thermal technologies or lubrication is a plus;
- A keen interest in stakeholder management.

You are

- Passionate about research and new technologies;
- Result-oriented, responsible, self-directing;
- Open-minded;
- Pro-active and take initiative;
- Eager to learn.

Offer

- Flanders Make gives you the opportunity to develop yourself within its network of leading industrial companies, universities and research institutes;
- An open-minded, flexible and challenging working environment;
- A warm atmosphere and top colleagues;
- An attractive salary with fringe benefits.

Flanders Make is the strategic research centre for the manufacturing industry. Our mission is to strengthen the long-term international competitiveness of the Flemish manufacturing industry. That's why we work together with both SMEs and large companies on pre-competitive, industry-driven technological research, resulting in concrete product and production innovations within the vehicle and mechanical engineering industry and in production environments.

How to apply?

To apply, go to <http://jobs.flandersmake.be>.

Please fill in the online application form and upload a motivation letter and cv.