

## Function description: Electrical Engineer

### Company

Turbulent develops, builds and sells fish-friendly, micro-hydropower plants across the globe. Our clients range from rural off-grid communities to SME's that want to generate continuous green energy. We are looking for an **experienced electrical engineer** to help us build and improve our technology, to have a positive impact on decentralized electricity production worldwide.

Our technology/company goals will present you with plenty of challenges as well as great responsibilities and growth opportunities. You will have a great impact on the company and our technical solution.

### Responsibilities and Tasks

As an experienced electrical engineer, you will work in team together with the electrical, software- and mechanical engineers in Turbulent. You will manage the design, production and further developments of our power & control electric solutions for the complete product range.

You will, with the Electrical team, be responsible for:

- The implementation of a highly scalable production process for our complete electrical solution for on-grid, off-grid and micro-grid configurations.
- An effective and efficient pre- and post- commissioning service package for our customers.

This entails:

- Production management of our turbine's electrical systems and cabinets.
- Installation and commissioning of turbines at customer site (worldwide).
- Quality control & quality management with continuous improvement practices.
- Technical support of installed turbines (both on-site and remote).

Your main R&D tasks are:

- Selection, implementation and validation of the optimal power electronics building blocks. Both for short- and long-term implementations.
- Developing the electrical systems supporting all necessary types of grid conditions:
  - Adapting the power & control system designs for systems in island-mode, microgrids or direct on-line (on-grid). This for both three-phase as single-phase systems.
  - Improvements on the control solution & component integration (from cabinet to PCB)
  - Certification of the electrical systems for different markets worldwide.
- R&D on operating turbines in series and parallel.

## Background

The job requires the academic degree of electrical, electromechanical or electrotechnical engineer, equivalent to the Belgian degree of “Burgerlijk ingenieur” or similar by experience.

As Turbulent is an international company your level of English must be excellent. Ideally you have 3-5 years of experience in the production and design of industrial electrical systems, and in engineering of motor/generator control systems in a power range from 5 kW up to 500 kW.

You have a good knowledge of industry practices in these fields and know how to use CAD software, preferably this includes E-Plan. Since the job entails product development & prototyping, you must have a practical mindset.

Familiarity with lean & agile development practices is a bonus.

You have experience in:

- industrial electrical cabinet research and development, from concept up to commercial product.
- Electrical CAD design (E-Plan), drawing schematics, selecting and sizing components according to regulations.
- Cable ampacity calculations etc.
- Power electronics & electrical motors, preferably in the domain of power generation.
- Micro-grids & Electricity distribution.

## Additional valuable experience

Experience in the development of control software and familiarity with Linux is a plus.

## Traits

- Customer oriented.
- Invested to realize the United Nations Sustainable Development Goals.
- Hands-on mentality; you like to put theory into practice yourself and apply your practical experience in research.
- Result driven, cost aware and pragmatic.
- Flexible (can deal with changing priorities) and self-reliant (capable of creating structure).
- Creative and solution oriented.
- Eager to learn.
- Willing to travel world-wide.

## Work location

We have a team consisting out of many cultures and nationalities, we are looking for an employee with the right skillset. Turbulent is located in Belgium, Leuven, but working remotely is a possibility if you are willing to regularly visit our office for team and work coordination.

We do expect you to be ready to travel on a regular basis anywhere around the globe. This means you would be abroad for  $\pm 20\%$  of the time if you are based near Leuven,  $\pm 30\%$  of the time otherwise.

## What we offer

- Besides a competitive salary and a contract of unlimited duration, you will also receive extra benefits: meal vouchers, home office compensation, hospitalization insurance, group insurance, etc.
- We also provide opportunities for professional growth and above all a pleasant working environment.
- We will soon setup a test site near Namur, equipped for full-scale live testing of our equipment.
- You will work in a scale-up with a team of less than 20 people, where we all know one another. Our team members work in an advanced environment with proprietary technology that has proven itself to be reliable, efficient and safe.
- Due to the advantages of our technology, our organization is gaining more and more recognition on the international market.

## Contact

Send your application together with your CV to [jobs@turbulent.be](mailto:jobs@turbulent.be) and feel free to contact us by e-mail for any questions.

By applying, you confirm that you have read and understood our [privacy policy](#) about GDPR and agree to its content.