

Powertrain

High Voltage Engineer



Green innovation meets performance

Our Project

Formula Electric Belgium is a student-based race team that pushes green innovation to performance. We design and build our own electric race car each year to participate in international Formula Student competitions. We are looking for pioneers to challenge the status quo and bring our top-notch electric race car to the next level. As a postgraduate student, you will research, design, and test your systems together with a group of highly motivated students. You will innovate together with your team members and numerous companies to develop our next generation formula student race car.

Function

As a High Voltage Engineer, you will be responsible for the design, integration, and validation of the **high-voltage drivetrain** that converts electrical energy into mechanical power at the wheels. You will work at the core of the electric powertrain, closely interfacing with the battery, inverters, and in-wheel motors.

Within the department, you will be responsible for the **fine-tuning and optimization of the existing drive package**, now entering its second year of operation. This includes improving control strategies, reliability, and performance while further refining the system to fully exploit its enhanced controllability for the four in-wheel motors.

In addition, you will be responsible for the **integration of new electric motors** into the drivetrain.

Profile

- Bachelor/Master Engineering Science, Engineering Technology or equivalent
- Knowledge about electrical motor design and the development of advanced drive systems
- Experience with Matlab and PID systems
- Interest in with CAD/FEM-software

Returns

- A unique engineering experience
- Developing your hard- and soft-skills in a company-like environment
- Work with the newest technologies and innovative companies
- Work in a team with a network of well over 120 partners
- A summer season packed with competitions all over Europe
- An experience of a life-time!

Up for the challenge?



Submit your **resume** and **motivation letter** (one page) to
recruitment@formulaelectric.be