



Powertrain Battery and Cooling

Green Innovation meets performance

Our Project

Formula Electric Belgium is a team of engineering students who build a **Formula-Student racecar** to compete in international competitions. We design and build a brand-new car every year and compete with other teams in multiple worldwide competitions during the summer months. Formula Student is by far the biggest **engineering competition** in the world and continues to grow. Since the 2024 season, FEB works on a combined manual (with driver) and **driverless** car. You can join the project during one or two years by applying for the '**Postgraduate Tech Innovations in Ventures and Teams**'.

Tasks

In this role, your primary focus will be on the **mechanical aspects of the battery** ensuring it accommodates the integration of electronics effectively. This is a broad task that involves mechanics and material science with force analysis and composites.

Maximal performance is accompanied with large heat generation. Your responsibilities extend to overseeing the cooling of battery cells, where Computational Fluid Dynamics (**CFD**) simulations come into play. Utilizing your expertise, you will ensure efficient thermal management of the battery, contributing to the overall performance and reliability of the electric powertrain.

Additionally, the **cooling system of the motors** will be under your purview, emphasizing the importance of maintaining optimal temperatures for these critical components.

Profile

- Bachelor/Master Engineering Science, Engineering Technology or Business Engineering
- Knowledge about heat transfer and CFD simulations
- Practical insight in mechanical connection techniques
- Interest in new CAD/FEM-software (Siemens NX)

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