

Powertrain

Battery and Cooling



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

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.

Up for the challenge?

You think you're the right person for this job? Don't hesitate to submit your resume and cover letter at our website:

<https://formulaelectric.be/join-us-postgraduate/>

Profile

- Bachelor/Master in Engineering Science, or Engineering Technology
- Knowledge about heat transfer and CFD simulations
- Practical insight in mechanical connection techniques
- 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!