

Chassis

Production 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 Chassis Engineer, you will be responsible for the design and manufacturing of the monocoque and all associated safety components, including roll hoops, seat belts, the seat, and other ergonomic-related elements. This entails composite structural design of the main load-bearing parts, proving their safety through calculations and testing. Lightweight, strength, and manufacturability are the core priorities.

The scope of this function includes determining the optimal layup for production, focusing on minimizing weight while ensuring compliance with the SES (Structural Equivalency Spreadsheet). This involves performing detailed calculations and conducting physical tests on sandwich laminate panels to identify the most efficient layup configuration without compromising structural integrity.

As a production engineer, you will need to acquire extensive knowledge of composites and learn how to work with them in practical settings. This will require close cooperation with the aerodynamics department, which also uses composites for their aero package. Iteration is key—you will need to refine the layup repeatedly to ensure it meets the competition rules while achieving the lightest, strongest, and stiffest possible configuration.

You will play a significant role in the monocoque production process, as you will have gathered the most experience working with composites during the first part of the year. This hands-on knowledge will make you an essential part of ensuring the production phase runs smoothly and successfully.

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, Engineering Technology, or related field
- Knowledge of composite materials and sandwich panel mechanics
- Familiarity with composite layup and production processes
- Experience with CAD/FEM software for design and analysis
- Understanding of SES compliance and structural validation

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!