

Vehicle Dynamics

Performance 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 **performance engineer**, you will focus on developing control algorithms that enhance vehicle handling and overall performance, such as **torque vectoring** and **traction control**. Together with the simulation engineer, you will design and validate these algorithms in the MATLAB/Simulink environment before implementing them on the ECU using C++.

Beyond control development, you will be involved in **selecting** and **integrating** the most suitable **sensors** for the car. You will collaborate closely with the kinematics engineer to define relevant load cases and to analyse tire data.

This role requires an **understanding** of **vehicle dynamics**, enabling you to translate data, simulations, and driver feedback into effective control strategies and improved vehicle handling.

Profile

- Bachelor/Master Engineering Science, Engineering Technology or equivalent
- Basic knowledge about vehicle dynamics
- Experience using MATLAB and preferably C++ as well
- Out-of-the box thinking and good problem solving skills

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