

Vehicle Dynamics

Controls and 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 vehicle dynamics control engineer, you will work on control algorithms to improve vehicle handling, such as torque vectoring and semi-active suspension control. You will develop these algorithms in the MATLAB/Simulink environment and then download them to the ECU in C++.

You will also need to select the most appropriate sensors to implement in the car and work with the kinematics engineer to define the load cases and analyse tire data.

You will also analyse test data to gain insight into how the car and driver are performing and where improvements can be made. A lap time simulation should also be performed using software to anticipate optimal setup and design choices during the concept phase of the project.

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 Engineering Science, Engineering Technology Engineering
- 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!