



Vehicle Dynamics Mechanics

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. From next year on, we will be competing in both the **electrical** and **driverless** competition. You can join the project during one or two years by applying for the '**Postgraduate in Innovation and Entrepreneurship in Engineering**'.

Tasks

As a Vehicle Dynamics Engineer, you will be responsible for all the aspects regarding the handling of the vehicle. This consists of designing the suspension and steering system, determining spring rates, choosing a good base set-up, all while ensuring that the design is rule-compliant. Also writing new, and improving existing algorithms in Matlab, think of Torque Vectoring, traction control... These have a major impact on the maneuverability and 'drivability' of the car.

Another important part of the car is the Semi-active suspension system. This system needs to be reliably implemented on the car, and some testing needs to be performed to make sure it performs as it should. The work does not stop once the competitions start: you make sure that the car is set up properly for the various events, and that all the knowledge from the tests is put to good use.

Profile

- Basic knowledge on vehicle dynamics
- Experience with Matlab
- Willing to learn quickly about different aspects of vehicle dynamics

Returns

- A field of expertise that is quite unique to this project
- Hands on experience in a competitive environment
- Insight into different algorithms
- Business relations with motorsport related companies

Up for the challenge?



Subscribe for our recruitment mail on www.formulaelectric.be/recruitment and submit your **resume** and **motivation letter** (one page) to recruitment@formulaelectric.be