



Vehicle Dynamics

Hardpoints

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 as a volunteer. This allows you to contribute to the next race car whilst keeping a flexible schedule.

Tasks

The **handleability** of a car depends mostly on the vehicle dynamics of a car. The **hardpoints** of the suspension defines the kinematics of the movement of the wheels. This will affect the vehicle dynamics of the car. To define these hardpoints we use **software** that can simulate the wheel travel, toe-gain, camber-gain and so on. The target of this function is to make a car that is reliable and always provides the right amount of **grip**.

As a member of the suspension department you don't only simulate the hardpoints, but you also make the **suspension arms**. Here you will use a sandblaster and lots of glue.

Profile

- Basic knowledge about vehicle dynamics
- Experience or interest in kinematic simulations
- Working iteratively is no problem for you

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
<https://formulaelectric.be/vacancies-theses/>