# Vehicle Dynamics

# **Steering Mechanical Design Engineer**

### Green innovation meets performance

#### **Our Project**

Formula Electric Belgium is a team of engineering students who build a **Formula Student race car** 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. Next year, 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 part of the Vehicle Dynamics department you are responsible for the **design and physical implementation** of the **steering system**.

This means that you are responsible for all the components between the steering wheel and uprights, such as the connection to the quick release, steering shaft, universal joint, steering rack, and the various brackets.

You will be responsible for the **calculations** regarding **steering torque and forces**, and simulating **stresses** in the various components to ensure that the steering system has **low compliance** and can withstand the forces applied to it, while being as **lightweight** as possible.

In this position you are also in charge of **mounting** the steering components to the vehicle during the **production** phase.

#### Profile

- Bachelor/Master Engineering Science, Engineering Technology or Business Engineering
- Basic knowledge about vehicle dynamics
- Experience with CAD software and FEMsimulations
- Hands-on experience with tools and machining

#### 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 lifetime!

## Up for the challenge?



Submit your resume and motivation letter (one page) to

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