

# Vehicle Dynamics

## Kinematic and Force Analyst



**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

The hardpoints of the suspension define the kinematics and thus the movement of the wheels in different driving scenarios. In this role you will define these hardpoints to enhance and **achieve desired vehicle handling**. To do this you will use software that can estimate wheel travel, toe-gain, camber-gain and other KPIs for set maneuvers.

In addition, you will work with the Performance Engineer to define the **load cases** for the **suspension** and **in-wheel components**, and **analyse tire data** together.

The goal of this role is to build a car that is **reliable** and always provides the **right amount of grip** based on our tires.

### Profile

- Bachelor/Master in a STEM field or equivalent
- Basic knowledge about vehicle dynamics
- Experience or interest in kinematic simulations
- Appreciates working iteratively

### 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](mailto:recruitment@formulaelectric.be)