Vehicle Dynamics

Kinematics

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 the international Formula Student competitions. This year, 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, test your systems together with a group of highly motivated, ambitious students. You will work together with your team members and numerous companies to develop new innovations.

Function

As a Vehicle Dynamics engineer, you will be responsible for all aspects regarding the handling of the vehicle. This consists of designing the suspension and steering system, determining spring rates, choosing a good set-up, all while ensuring that the design is rule-compliant.

As a kinematics engineer within vehicle dynamics, you are the main responsible for the way the wheels move compared to the chassis, as well keeping steering forces low to ensure our driver can drive endurance events.

You will have a big influence on the setup of the car where you will simulate different movements like roll, pitch, heave and steering angles to have a closer look at the camber and toe changes. Since our wheel size will be reduced from 13" to 10" to reduce our unsprung mass, this will be challenging to make everything fit in the tight space there is.

Profile

- Bachelor/Master Engineering Science, Engineering Technology or Business Engineering
- Basic knowledge of vehicle dynamics (wheel angles, steering and suspension geometry)
- Communicative
- Team player

Returns

- Hands-on experience in a competitive environment
- Deep insight in a double wishbone suspension
- Gain exposure to cutting-edge technologies and industry-leading organizations
- Possibility to network and cooperate with (motorsport related) stakeholders
- A summer packed with international racing competitions!

Up for the challenge?

Submit your **resume** and **motivation letter** (one page)

to recruitment@formulaelectric.be