

EXPLORING FEASIBILITY OF REAR WHEEL STEERING

OUR PROJECT

Formula Electric Belgium is a student-run electric race team which competes in Formula Student, the world's largest competition for engineering students. We aim to push the limits of performance, innovation and sustainability within electric racing every year, which is only possible with the help of our Thesis students. These pioneers are responsible for performance-defining innovations within the team, and we would love for you to join our team of highly ambitious and motivated engineers. As a Thesis student, you will research, design, prototype and test your innovations alongside the full-time members which make sure the team pushes itself and the car to new heights.

AIM AND OBJECTIVE

Within Formula Student rules, rear-wheel steering systems are legal, and can take the form of active or passive systems, or setup changes to induce a rear-steer effect. A system like this can increase the maximum yaw-rate a car can achieve, which would offer a performance benefit in many of the events present at competitions.

The aim of this thesis is to explore the feasibility of such rear-wheel systems for FEB's Formula car. This exploration would include all possible systems within the regulations of the competition, and the feasibility of their implementation in the forms of its design, manufacturing, assembly, and overall cost. Additionally, a study about its effectiveness under driving conditions would need to be included when compared to a car without the system implemented.

PROFILE

- Starting a Master's in Electro-mechanics
- Motivated team player with strong communication skills
- Basic knowledge of CAD and FEM
- Basic knowledge in Vehicle Dynamics and Kinematics
- Diplomatic approach with companies

RETURNS

- Unique experience within a racing team
- Genuine work experience to carry with you into your career
- Exposure to cutting edge technology and software
- Contact with industry-leading corporations
- Chance to network and work with international stakeholders

INTERESTED?



Send us your contact details and field of interest to:

recruitment@formulaelectric.be