

Design and analysis of a new in-wheel concept

OUR PROJECT

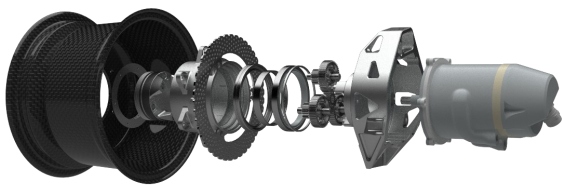
Formula Electric Belgium is a student-run electric race team which competes in Formula Student, the world's largest competition for engineering students. We aim to push the limits of performance, innovation and sustainability within electric racing every year, which is only possible with the help of 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

Our formula student racecar has a 4-wheel drive, where each wheel has a motor and internal gearbox. All parts inside our wheel are what we call the "in-wheel". The aim of this thesis would be to rethink and improve our in-wheel concept. The aim would be to reduce the weight, increase the stiffness and improve the maintenance.

Key objectives would be:

- Research of design requirements
- Determining the loads and required stiffness
- Dimensioning of bearings and seals
- Comparing different concepts



PROFILE

- (electro) mechanical engineer
- Experience in Siemens NX for modelling and FEA
- Be able to think outside of the box

RETURNS

- Practical experience in a high-end engineering context
- Work with the newest technologies and innovative companies
- Developing your hard- and soft-skills in a company-like environment
- Participation in the biggest student competition in the world

INTERESTED?



Send us your contact details and field of interest to

recruitment@formulaelectric.be