



Vehicle Dynamics Algorithms And Testing

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.

Our vehicle is equipped with 80kW (110hp) for a vehicle of roughly 200kg. Without algorithms we are not able to put all this power to the ground and maintain controllability. Your task will be to keep working on our previous algorithms. Make them faster and more accurate while also improving our vehicle simulation model.

You will be in charge of certain testing days where the main focus is testing these algorithms as well as setup testing. As main responsible for this you will have to prepare testing days, go testing, and also process test data and make right decisions.

Profile

- Bachelor/Master Engineering Science, Engineering Technology or Business Engineering
- Experience in Matlab
- Basic knowledge of vehicle control algorithms (torque vectoring, traction control...)

Returns

- Hands-on experience in a competitive environment and get to work with driver feedback
- Deep insight in a double wishbone suspension
- Insight into different algorithms
- 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