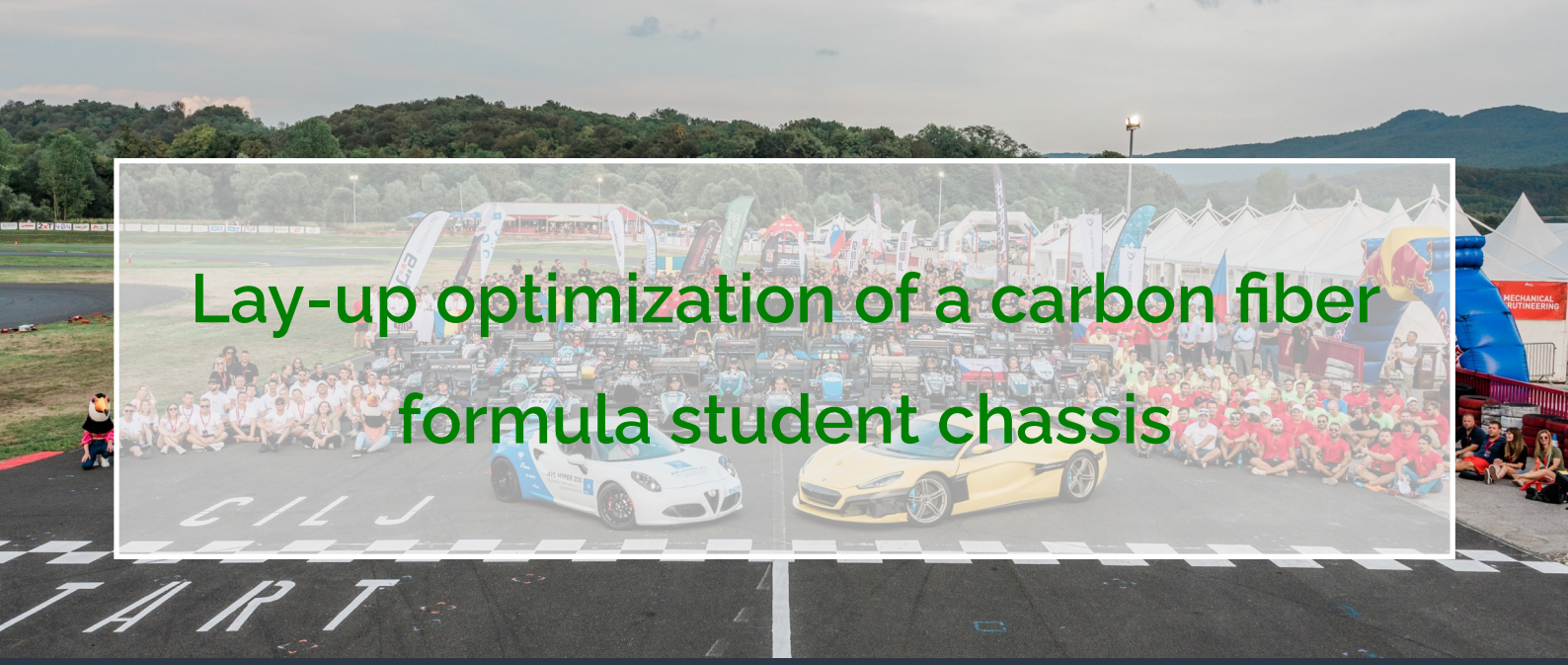

Lay-up optimization of a carbon fiber formula student chassis

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 Thesis student, you will have to research, design, prototype and test your systems together with a group of highly motivated, ambitious students. You will work together with our team members and companies to develop new innovations.

Description and objective

The carbon fiber monocoque is the largest component of the whole race car, spanning over 2m. The weight of this component exceeds 25kg, which is a significant portion of the total weight of the car. Lay-up optimization allows us to decrease the weight, and increase the performance.

During this thesis, you will look at the different zones in the monocoque and their mechanical requirements. You will critically investigate and evaluate the lay-up and the influence of geometry on the total strength and stiffness. Additionally, you will evaluate the implementation and design of the hard points.

Profile

- Bachelor Engineering Science or Technology
- Motivated team player with strong communication skills
- A professional and entrepreneurial attitude
- A direct but diplomatic approach towards companies
- Basic knowledge of material sciences

Returns

- Experience in an unique field of expertise
- Gain exposure to cutting-edge technologies and industry-leading organizations
- Possibility to network and cooperate with international stakeholders

Join our research team!

Mail your contact info and field of interest

to recruitment@formulaelectric.be