



# UGent Racing 2024 - 2025

## Driver Ergonomics

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### Pedalbox Engineer



#### OUR STORY

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**UGent Racing** is a team of more than **80** ambitious, motivated and talented **students** who build an **electric** and **autonomous driving race car**. The team consists both of engineering students and business students. UGent Racing aims to participate in the **Formula-Student Competitions** which are organized during the summer months across different European countries. Moreover, UGent Racing intends to have a **positive impact on society** by contributing to the mobility of tomorrow and forging higher education of the future.

#### YOUR RESPONSIBILITIES

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As a pedalbox engineer you are a part of the **Driver Ergonomics subteam**. Here you will **design and build a pedalbox** for the next generation autonomous race car. This starts by calculating the braking forces and **optimizing the weight and packaging**. This whilst considering different constraints such as pedal travel, available space, and different sensor positions. After this comes the **use of simulations** to test different loading scenarios. The car also must be capable of **autonomous braking**. Some sort of actuator thus has to be designed and implemented. The next important step is the **CAD - modelling**, taking in to account the production and assembling process. Lastly, you will **build and test** the pedalbox and integrate it in the next generation autonomous race car of UGent Racing.

#### YOUR PROFILE

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- Highly motivated
- Committed
- Open-minded
- Communicative
- Engineering background
- CAD skills

#### OUR OFFER

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- Be part of a young, ambitious team of engineers and business students
- Apply your theoretical knowledge when developing useful applications
- Get the chance to participate in the international Formula Student Competitions
- Play a key role in optimizing braking performance the next generation race car

#### INTERESTED?

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Contact us through [recruitment@ugentracing.be](mailto:recruitment@ugentracing.be) if any questions would pop up.