

# UGent Racing 2024 - 2025

# Autonomous

Control Engineer



## OUR STORY

**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 intents to have a **positive impact on society** by contributing to the mobility of tomorrow and forging higher education of the future.

#### YOUR RESPONSIBILITIES

As a control engineer in our Control subteam, your expertise in **modelling and designing vehicle models** and controllers will be crucial in ensuring the success of our race car. You will work with data from **Simultaneous Localization and Mapping (SLAM)** to generate **real-world actuator signals** that translate into reliable and efficient movement. This requires a deep understanding of control theory. In addition, you will explore **advanced algorithms such as MPC(C)** for optimal control. You will have the opportunity to work with cutting-edge technologies and contribute to the development of next-generation

#### YOUR PROFILE

OUR OFFER

- Knowledge of control engineering
- MATLAB & Simulink experience
- Highly motivated
- Committed
- Open-minded
- Communicative
- Creative

- Be part of a young, ambitious team of engineers and business students
- Get the chance to work on an actual self-driving car
- Apply your theoretical knowledge when developing useful applications
- Get the chance to participate in the international Formula Student Competitions
- See your own design come to life on the new race car

### INTERESTED?

Contact us through <u>recruitment@ugentracing.be.</u> If any questions would pop up, please feel free to ask.