



Teammember Mechanics

About Zurich UAS Racing

Zurich UAS Racing (ZUR) is a student association with 70 members from over 15 study programs, united by the goal of competing in Formula Student – the world's largest engineering competition. Each year we design, build, and test an electric and autonomous race car to compete against top universities across the world, offering students hands-on experience, project skills, and an international career network.

1) Project work in the field of CAD – your entry in the 1st and 2nd semesters

Your Tasks

- Creating and adapting 3D CAD models (depending on the scope of the project)
- Creating production documents
- Supporting the design implementation of assemblies
- Assisting in various sub-teams – this will allow you to familiarise yourself with different assemblies and working methods

Your Profile

- You are enrolled at ZHAW and are studying mechanical engineering or aviation (1st or 2nd semester)
- Completed training as a constructor or comparable practical experience is an advantage
- Initial experience in the field of CAD
- Ability to create technical drawings
- Reliability, initiative, ability to work in a team and willingness to learn
- Enjoyment of association life, interest in motorsport and desire to apply your knowledge in a practical setting

2) Direct entry as a subteam member – from the 3rd semester onwards or with prior knowledge

Possible Sub-Teams

- Chassis – Chassis, Structure, Ergonomics, FEM
- Aerodynamics – Front wing, Side pods, Rear wing, Body, Underbody, CFD, Simulation
- Suspension – Suspension, Kinematics, Simulation
- Powertrain – Engine, Gearbox, Cooling, Brakes
- Cooling – Pumps, Radiators, Thermal development
- Electronics – Accumulator, Inverter, Sensors, Controllers, Housing
- Cockpit – Ergonomics, Steering system, Pedal box
- Lamination – Manufacturing of carbon parts
- Driverless – Pneumatics, Hydraulics, Sensors, Controllers, Motor, Steering

Your Tasks

- Collaboration in a specialised sub-team
- Possible team lead for sub-projects or assemblies
- Help in manufacturing and testing (e.g. laminating carbon components, FEM calculations, chassis tests)

Your Profile

- You are enrolled at ZHAW (from the 3rd semester onwards)
- You have prior knowledge or a strong interest in one of the areas mentioned
- CAD, FEM or manufacturing knowledge is an advantage
- You are reliable, proactive, a team player and eager to learn

Benefits

- In your first year, you will get to know various sub-teams and can help with projects, giving you a broad overview of the entire car.
- From your second year onwards, you will have the opportunity to choose a sub-team and take on responsibility for assemblies or sub-projects.
- You'll have the possibility to continue your work during a project work or bachelor thesis
- Gain relevant on-the-job experience and put your studies into practice.
- Have fun, enjoy cool team events and make valuable contacts for your career.

Time commitment

The time commitment is approximately 6–10 hours per week, including weekly meetings. The amount of time required may vary depending on the phase (design, production, events). We know that you have to balance your studies, free time and projects, but with this commitment you will be fully involved, learn a great deal and see how your work is directly reflected in the finished racing car.

Apply now!

Send us an email with your CV and cover letter to info@zurichuusracing.ch