



## Open position – *Mechanics*

### *Break & Suspension*

#### **YOUR DEPARTMENT**

The mechanics department connects both the vehicle to the road and the various structural components. The main area of responsibility is the design and manufacture of the components between the tyres and the monocoque and the mechanisms required for the solar car. This includes the design and construction of wheel suspensions, folding mechanisms or the steering system, which have to meet all load cases and are optimised exactly to the available installation space. In doing so, the maxim is followed: "As light as possible, as stable as necessary".

#### **YOUR TASK**

Your main task will be to design and develop the brake system and then to test the system. If necessary, you will design and test your own brake calliper, which is exactly designed to our requirements. Your second task will be to design a part of the suspension system and work closely with the person in charge. To successfully complete these tasks, you will work intensively in CAD to carefully plan and design your assemblies. With the help of motion analyses, you will ensure that the functionality of these components is guaranteed. In addition, you will optimise and safely design your components on the basis of load case analyses and FEM simulations. You will take care of the production of your components and keep an eye on the production. Finally, you will assemble and test your components.

#### **WHAT YOU BRING TO THE TEAM**

- Enthusiasm for the project!
- Student in mechanical engineering or a comparable field of study
- High level of commitment and motivation to get to grips with complex problems
- Initial experience and knowledge with CAD is advantageous

#### **WHAT WE OFFER YOU**

- Development of one of the most efficient solar cars in the world
- Opportunity to apply your theoretical knowledge in practice and implement your own ideas in an exciting environment
- Use of CAD within the scope of a demanding project
- Contact to potential employers and the development of a professional network (in industry and research)
- THE experience of your studies!

#### **APPLICATION**

Please apply exclusively via the application form on our website:

[www.sonnenwagen.org/join](http://www.sonnenwagen.org/join)



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