

# **Open position – Electrical Engineering**

Wiring Harness & Lights YOUR DEPARTMENT

The electrical engineering department brings the vehicle to life. Its main area of responsibility includes the design, manufacturing and integration of the electrical systems required to operate the vehicle. This includes the implementation of efficient solar cells, the integration of batteries, the powertrain and the control electronics. Reliability and energy efficiency have the highest priority to ensure smooth running during the races.

# YOUR TASK

Your task will be the development of the wiring harness and lights for our fifth-generation solar car. The position is particularly versatile, as you will be involved in both circuit boards and the fundamental mechanical design of components. Your specific tasks include:

- Component selection from connectors, cables, and management systems from aerospace and motorsports based on a complex system understanding.
- Conceptualization, design, construction, and final certification of highly efficient and space-saving lights, as well as their integration into the aerodynamic outer shell of the vehicle
- PCB design for high-power LEDs, building prototype modules, and planning & integrating them into a virtual solar car model.

# WHAT YOU BRING TO THE TEAM

- Enthusiasm for the project!
- Student in the field of electrical engineering, computer engineering or a related field of study.
- Problem-solving abilities and breaking down complex systems.
- Experience with CAD design is advantageous.
- Conscientious and responsible work approach.

# WHAT WE OFFER YOU

- Development of one of the world's most efficient solar vehicles
- Opportunity to apply your theoretical knowledge in practice and implement your own ideas in an exciting environment.
- Use of CAD, Altium Designer, Capital as part of a challenging project.
- Interaction with potential employers and building a 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



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