Are you fascinated by space?
Do you wonder what is possible when academia and industry work together?
Would you like to join a team that makes systems made for space?

If the answer is yes, yes and yes, we would love to hear from you!

CubeSat – Electrical Power Systems Engineer

ARIS is a student initiative based at ETH Zürich (Dübendorf) and inspires students across Switzerland with opportunities to **put into practice what you have been studying** in theory by gaining **hands-on space engineering experience** and contribute to space engineering challenges through academic and industry collaborations.

ARIS' CubeSat mission will be the first demonstration of our capability to develop space-grade systems. This is an exciting and significant departure from ARIS' previous projects focused primarily on rocket technologies. By taking a step into the field of developing miniaturized satellites we introduce ARIS' first multi-year project. What makes this project so unique is the challenge to design and fit a complex, small scale system which can withstand and operate in an extremely harsh environment.

As a **Electrical Power Systems Engineer** you will be responsible for the energy flows within the CubeSat. Furthermore, you will have an overview of, and be responsible for, the mechanical systems that involve a heat transfer process into other forms of energy. You will also work closely together with other teams such as the structures team to insulate and shield the CubeSat from the harsh space environment. Since this position revolves quite heavily around thermodynamics, having a good understanding is key.

To achieve our ambitious projects and continue our exciting growth, we are searching for a motivated **Electrical Power Systems Engineer**.

Tasks include:

- Manage and keep an overview of the energy flows within the CubeSat structure and payload
- Provide the necessary power supply for the whole system
- Work on the power budget
- run power simulations
- Design components and mechanisms needed for power supply
- Work closely together with all the subteams
- Conduct tests to validate and verify your system
- Tackle problems with ingenuity and perseverance

Expectations

From each of our team members we expect:

- spend 2-3 days a week on the project and be able to join team meetings and workshops at Switzerland Innovation Park in Dübendorf, ZH
- Be proactive and able to take responsibility
- Fail, get up and learn from it
- Take responsibility for your projects and tasks
- Work closely with the other engineering, marketing, and business teams within ARIS.

What do you get?

By participating in this unique challenge, you will:

- Get in contact with many sponsors from academia and industry
- Take initiative outside of the classroom and gain hands-on experience
- Establish and grow your network in industry and academia
- Be part of a friendly community, grow as a unit and build life-long friendships
- Kickstart your career!

Project start: August/September 2022
Duration: min. 2 semesters
Working hours: 2-3 days/week

Please be informed that your work will be entirely voluntary. As we are a student project, we do not offer any paid employment.

Any questions? Get in touch.

We look forward to hearing from you! Please submit a complete application, including CV. If you have any questions, please reach us on **hr@aris-space.ch** or **cubesat@aris-space.ch**.