

Are you fascinated by space?

Do you wonder what is possible when academic and industry work together?

Would you like to join a team that makes real rocket launches happen?

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

Structures 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.

From the technical side, this year ARIS goes into the 6th round of challenges. Following project HELVETIA, ARIS will participate at the European Rocketry Challenge in Portugal with its own hybrid rocket engine. ARIS also conducts events to support these activities, and has ongoing engagement with sponsors, the public and professors.

From the business side we have grown a lot over the last year. We have been expanding our ARIS business team, in the areas of marketing, finance and HR. Furthermore, and we have also started a collaboration with University St. Gallen and their prestigious business unit.

To achieve the ambitious projects and continue our exciting growth, we require a motivated **Structures Engineer**.

As a member of the Structures sub-team your main responsibility is to design, simulate and build various parts and components of the ongoing project. This can include a rocket fairing, substructures to mount an engine, the fins or the payload as well as mechanisms for flight control and separation.

Tasks include:

- Familiarize with ARIS and your team
- Learn about rocket design and the state of the art of sounding rockets and their propulsion
- Use product development tools to devise and refine a system tailored to the mission
- Make detailed 3D models of the system using CAD software
- Dimension parts to the expected static and dynamic loads using FEA software
- Make technical drawings of parts and coordinate the manufacturing with industry partners
- Acquire the technical skills needed for the in-house production of composite parts
- Manufacture and assemble your system
- Tackle problems with ingenuity and perseverance



Expectations

From each of our team members we expect:

- We expect you to 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 responsibilities over your projects and tasks
- Work close with your marketing team but also with the engineering teams

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: Minimum 1 semester

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.