

## STRUCTURE TEAM

mechanical engineering, material engineering

Our student initiative is based at ETH Zürich and inspires students across Switzerland in hands-on space engineering challenges through collaboration with academia and industry. Our main project is the participation at the [Spaceport America Cup](#).

Following our [Project TELL](#), ARIS participates at the Spaceport America Cup 2019 with a rocket using a commercial solid motor flying to 10'000 ft. For this, an interdisciplinary core team of 20 students is formed that builds the rocket and participates at the competition in the US.

The responsibility of the **Structure Team** is the design and manufacturing of the load carrying rocket structure. During the design process the parts are optimized using FEA. The design follows requirement inputs from other subteams. This work package includes:

- Deriving an improved structure concept based on Project TELL
- Designing the rocket structure in CAD (Siemens NX & Teamcenter)
- Simulating loads on rocket structure using FEA
- Technical Drawings for manufacturing aluminium parts at external machining workshops
- Manufacturing of composite parts such as tubes or nosecone at CMAS-Lab, ETH Zurich and RUAG Space, Zurich
- Coordinate interfaces of other subsystems with the rocket structure

We recruit an interdisciplinary core team that is motivated and capable to accomplish the tasks above. From our members, we expect the following attitude:

- Fail, get up and learn from it
- **You don't have to be a specialist** but you are willing to become one
- Join the team and grow as a unit
- Be proactive and able to take responsibility

We expect you to spend 2-3 days a week and be able to join team meetings and workshops in Zurich. Since we are a student association we don't hire any interns.

Send us a short description in what you're interested in and your CV (with picture) to

**[recruiting@aris-space.ch](mailto:recruiting@aris-space.ch)**

