

# AETHER



## Design, Build and Launch of a Re-entry CubeSat

AERO-& THERMODYNAMIC ENGINEER

### THE PROJECT

Aether is a team of motivated engineering students that have the ambitious goal of bringing the capabilities of sample return to the CubeSat platform. To succeed in this, we are first focussing on the creation of an inflatable heatshield. This is no easy feat, as the hypersonic re-entry creates a challenging environment for our satellite.

"A Cube-what?" you may ask. A CubeSat is a type of nanosatellite that comprised of small 10x10x10 cm cubes. This type of satellites is interesting as it is a 'cheap' platform to conduct research and testing in space.

We are currently looking for new people to join the team. You can join the team for one or two years in function of a Postgraduate program. The requirement: Having a bachelor's degree or higher.

### FUNCTION

As Aerodynamic-& Thermodynamic Engineer you will be using Computational Fluid Dynamics software to simulate the high-temperature gas flow over our spacecraft during its hypersonic re-entry. You will be responsible for examining and designing the spacecraft to deal with the resulting heat flow, as well as the heat produced by electronic components while in-orbit. You will be working in close relation with the structural and material departments to improve the design.

### PROFILE

- Motivated team player
- Good communication skills
- Computational Fluid Dynamics experience
- Thermodynamic experience
- Computer Aided Design experience

### RETURNS

- Extensive experience with hypersonic aerodynamics
- Extensive experience with thermal flow inside a satellite
- Ability to connect with our partners in the space industry
- First-hand experience in working on a space mission



aetherspace.be

### Interested? Contact us!



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