

HOPPER Avionics Engineer



About Hopper

Hopper is one of Europe's most ambitious student rocketry projects. Our goal is to push the boundaries of student aerospace engineering by developing a throttling rocket engine, avionics modules, embedded software, ground systems, and more—all to demonstrate one of the first vertical landing rockets in Europe.

We are looking for passionate and motivated students to join our journey. Prior experience in rocketry is not required—curiosity, dedication, and a drive to solve technical challenges are what matter most.

Your Role

As an Avionics Engineer on the Hopper project, you will:

- Design, build, and test custom circuit boards for avionics systems
- Collaborate with software and mechanical engineers to ensure seamless integration
- Architect and prototype new hardware solutions for mission-critical systems
- Support hot-fire tests and flight campaigns, ensuring reliability under extreme conditions
- Take ownership of complete subsystems, from concept to deployment
- Work primarily with STM32-based designs using Altium Designer
- Conduct hardware research and review designs from other engineers

This role gives you hands-on experience across the full hardware development lifecycle, with direct impact on mission success.



Requirements

- Enrolled at RWTH Aachen University or FH Aachen
- **Highly motivated**, proactive, and eager to learn
- Available for **at least two days per week**
- Strong independent problem-solver who also thrives in a team environment
- Fluent in both German and English (written and spoken)

Technical Skills (preferred)

- Experience with electrical components and PCB design
- Familiarity with Altium Designer, KiCad or similar

What You'll Gain

- Be part of building Europe's largest rocket hopper
- Apply your academic knowledge in real engineering challenges
- Join rocket test campaigns and see your work in action
- Build a strong network in the space industry
- Develop practical experience with cutting-edge technology

Application Steps

If you are interested in applying, please submit the following documents to application@sta.rwth-aachen.de:

1. **CV:** An up-to-date CV outlining your academic background, experience and relevant skills.
2. **Motivational Letter:** A short letter explaining your interest in the project, your qualifications, and how your goals align with our project.
3. **Description of past engineering projects** (if available): A document summarizing key projects you have worked on, including your role, the project objectives and technologies used.

Please ensure all documents are in PDF format.

Step 1

Application Received

Step 2

Resume review

Step 3

Short Phone Call

Step 4

Interview

Step 5

Offer!



Space Team Aachen e.V.

Email: application@sta.rwth-aachen.de

Web: www.spaceteamaachen.de

Registergericht: Amtsgericht Aachen
Registernummer: 5991