

HOPPER

Mechanical 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 a Mechanical Engineer on the Hopper project, you will:

- Take ownership of the design, manufacturing, and testing of high-pressure propellant tanks and COPVs
- Operate and further develop our custom filament winding machine
- Plan and conduct structural and pressure testing campaigns
- Support the production and testing of critical structural components
- Develop CAD models and precise manufacturing drawings
- Perform technical research and actively review designs from fellow engineers

You will gain broad, practical experience across all phases of aerospace hardware development and make a tangible impact on a real rocket.



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 CAD software (preferably Siemens NX)
- Basic understanding of structural analysis and Finite Element Analysis (FEA)

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 engineering 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