CSUM | CENTRE SPATIAL DE L'UNIVERSITÉ DE MONTPELLIER

FONDATION VANALLEN UNIVERSITÉ DE MONTPELLIER

Internship offer

Mechanical engineer

cometes

FRANCE 2030

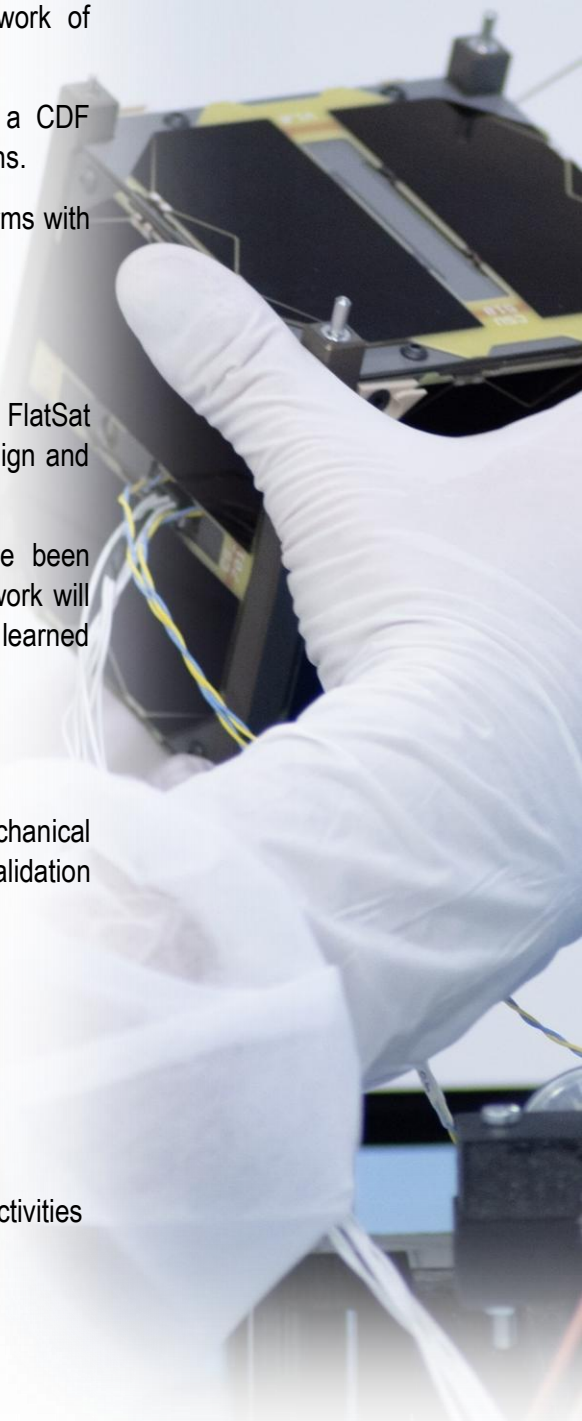
The University Space Center of Montpellier

The University Space Center of Montpellier (CSUM) is the French leader in the development and operation of nanosatellites developed by students.

It has acquired in-depth competence in the field of design, manufacturing, testing and operation of nanosatellites and their subsystems, as well as in space project management and product assurance in the framework of university space projects.

The CSUM has an AIT (Assembly Integration and Test) Facility, a CDF (Concurrent Design Facility) and both UHF and S-band Ground Stations.

The CSUM develops its own 1U to 12U CubeSat nanosatellite platforms with the support of the Van Allen Foundation.



Internship description – Context

The 12U platform is currently in Phase B and has entered in the FlatSat campaign. A team of interns will be responsible for finalizing the design and supporting the AIV (Assembly, Integration, and Verification) activities.

The 1U and 3U platforms are already well-established and have been successfully used as a basis for previous missions. The upcoming work will focus on further improving these platforms by incorporating lessons learned and mission heritage.

Mission

The mechanical engineer intern will be in charge of the mechanical development and will be involved in the Assembly, Integration and Validation (AIV) activities of different projects.

Main activities related to your mission:

- Create and update mechanical parts using Solidworks
- Perform mechanical simulations of subassemblies
- Design and develop new Ground Support Equipment (GSE)
- Design and manufacture 3D-printed prototypes
- Participate in the Assembly, Integration and Validation (AIV) activities

- Ensure proper tractability of the development process (logbook, reports, justification file)
- Collaborate with others interns and engineers

Level:

2nd year of master's degree or equivalent.

Duration:

4 to 6 months

Skills

- **Languages**: English – ability to discuss technical topics with experts and write technical documents.
- **CAO**: Proficiency with CAD software (Solidworks or equivalent)
- **Documentation & Reporting**: Ability to produce clear technical reports and presentations
- **Enthusiasm for space**
- **Ability to work in a multidisciplinary team**
- **Knowledge of electronics**
- **Basic knowledge of electronic systems**

Location:

Centre Spatial Universitaire de Montpellier, Campus Saint-Priest, Montpellier, France.

Stipend:

4.50 euros/worked hours for duration between 308 and 924 hours, 35 hours/week.

Preferred starting date:

March 2027

Supervisor:

Romain BRIAND – Mechanical and AIT manager.

Contact: romain.briand@umontpellier.fr

How to apply?

(Use the form to submit your CV and cover letter)

https://csum.umontpellier.fr/emplois-stages/