

Structure and Thermal Subsystem - Job Description

The Structure and Thermal subsystem is in charge of the overall structural design and integrity of the spacecraft. It ensures that all components within the structure are mounted, enclosed and protected. It features interfaces for payloads and secondary structural elements. This subsystem also ensures that the thermal loads are managed within the overall CubeSat.

The Structure and Thermal subsystem is responsible for the selection of a spacecraft bus, which would be either a commercial off-the-shelf (COTS) structure and a proprietary design (most likely 3D printed). The team is also responsible for the thermal, static and dynamic loading analysis of the overall design.

Required Qualifications, Skills and Experience

Essential

- Student/Graduate in Aerospace Engineering, Mechanical Engineering or another related discipline (STEM)
- Good knowledge of Microsoft Office Pack
- A can-do attitude
- A good team player, but equally comfortable working independently
- Able and willing to expand knowledge through reading relevant material and manuals
- Self-motivated and proactive
- Availability to attend weekly meetings and work independently (minimum 2 hours/week)

Nice to have

- Experience working with any design tool (SolidWorks, Autodesk, Catia, Unigraphics etc.)
- Experience working with any analysis tool (Ansys Workbench, FEA etc.)
- Familiar with stress analysis, thermal analysis, modal analysis
- English – intermediate level
- Can produce good quality documentation