

## Spacecraft Engineer (Mechanical Design) at STAR@NUS

The Satellite Technology and Research Centre (STAR) focuses on building miniaturized satellites that could fly in multiples for formation and constellation flying. It is envisioned that this will open up new potential applications such as collaborative sensing for the environment, more timely and scalable communication services. Satellite missions of these applications will in general require advanced technologies such as active propulsion control of the satellites, highly precise inter-satellite navigation, advanced attitude control etc.

Presently, STAR is developing satellites in the range of 20-50kg for multiple satellite missions using STAR's own-patented configuration for small satellites. We are looking for passionate mechanical engineers to join our development teams to bring innovative ideas and solutions to our satellite programs.

### About the job

- Pioneer development of mechanical design for spacecraft from research through to production.
- Innovate and explore potential upcoming technologies for satellite applications.
- Design for manufacturing, assembly and testing (DFX).
- Solve problems across multidisciplinary teams to ensure smooth integration of satellite subsystems.

### What we look for

- Bachelor's or Master's degree in Mechanical/Aerospace Engineering from a reputable university.
- 2 years of experience in designing mechanical systems. Fresh graduates are also welcome to apply.
- High level of proficiency in CAD (SOLIDWORKS, Inventor, NX) and 2D drawings including GD&T and tolerance stack.
- Sound understanding and knowledge of physical principles.
- A strong understanding of methodical design development through prototyping and DFX.
- Experience in designing with composite structures, FEA and thermal analysis will be a plus.
- Team-oriented individual with good inter-personal skills.
- Fluent verbal and written communications in English.

### Benefits

- Participate in the development of satellite projects at a world-class research facility.
- Be involved in a multi-disciplinary program, conducting research/engineering work from concept to space-qualification.
- Exposure to spacecraft design and testing based on NASA/ESA standards.
- Opportunity to pursue a Master's or PhD degree concurrently.
- Opportunity for external training in relevant skillsets.
- Competitive salary. Singaporean males who have completed fulltime National Service will be considered as work experience.

Interested applicants may send their resume via email to:

Satellite Technology and Research Centre (STAR)

[star@nus.edu.sg](mailto:star@nus.edu.sg)