

## 19/04 - Mechanical/Thermal Team Placement

### Thales Alenia Space in the UK Ltd

***Please note:***

*Applicants must have the legal authorisation to reside and work in the UK in order to be considered for this placement*

*Priority consideration will be given to applicants that are towards the final stages of academic study or have recently completed their study.*

**Location**

Building 660, Bristol Business Park, Bristol BS16 1EJ

**Company Description**

Thales Alenia Space (TAS) has more than 40 years' experience in designing, integration, testing, operation and commissioning of innovative space systems. Using some of the world's most sophisticated technologies, we meet the needs of a variety of commercial, government, scientific and security customers. Our teams create the technology to monitor our oceans, help us better understand climate change and drive scientific progress. We also have developed key parts for the International Space Station and play a pivotal role in exploring the universe.

Thales Alenia Space in the UK (TASitUK), started in 2014, has over 160 employees between three sites in Bristol, Harwell and Belfast. TASitUK specialises in early stage technology development, satellite propulsion, radiation hardened electronics, small satellite design and assembly.

**Project Description**

TASitUK's Mechanical and Thermal Engineering team is split between the Harwell and Bristol sites. It includes functions for Mechanical Design (using CAD software), Mechanical Analysis (with FEA), Thermal Design/Analysis and Architecture. Typical projects include science payloads, electronic equipment, optical payloads, propulsion systems, mechanisms and payload modules. Project work ranges from early stage conceptualisations to delivery of flight hardware, and includes bids, de-risking and development work, detailed design, assembly and testing.

The intern will be given work in Mechanical Design, and possibly Mechanical or Thermal Analysis depending on their skills and interests. They will also be involved in early-stage breadboarding and concept demonstration model for new space mechanisms. They will also be exposed to an active project environment, with scheduled technical reviews of progress.

The length of the placement is 12 months.

**Student Specification:**

The student is required to have an open mind and be highly adaptable. They will need a good understanding of engineering materials and solid mechanics, as well as a keen interest in Mechanical Design.

A knowledge of Space technology and systems is helpful but not mandatory. Desirable traits include:

- An appreciation of business in engineering;
- Ability and willingness to give presentations in meetings / conferences;
- Comfortable at both working alone and working in multi-disciplinary teams;
- Ability to write & review coherent and structured reports;
- Familiarity with CAD software (Solid Works or Catia).
- Familiarity with detailed drawings and standards.
- Knowledge of manufacturing methods, their benefits and limitations.
- Familiarity with FEA software (MSC Nastran).
- Familiarity with MS Excel, Powerpoint and Word.

The work will be aiming to enhance the knowledge and capability of the Mechanica/Thermal Team for future mission requirements. Therefore, the most important requirement is a desire, willingness and capacity to learn.

Suggested courses include Mechanical Engineering.

**Closing Date for Applications: Thursday 14<sup>th</sup> February 2019**

Applications will be through the online form attaching a CV, before the closing date. They will be forwarded to the employer.