

18/01: Advanced Concepts Team Placement (Ref 180116 TAS UK) 12 month placement.

Company: Thales Alenia Space in the UK Ltd
Supervised by Andrew Bacon, Systems Engineer & Innovation Point of Contact
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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. In the TASitUK specialises in early stage technology development, satellite propulsion, radiation hardened electronics, small satellite design and assembly.

Project Description:

TASitUK's Advanced Concept Team carries out early stage work on scientific, commercial and defence space missions and technologies. During 2018 we will be carrying out a number of studies for the European Space Agency (ESA), including several on technologies for Mars sample return. In addition the ACT manages an ever changing portfolio of disruptive innovation projects where concepts are rapidly tested for technical and economic viability before being discarded or becoming official development products.

The intern will join the team and work on a wide breadth of space technologies and missions as they emerge. The concepts that the student will be actively working will not be known until they start but can be guaranteed to be exciting and on the cutting edge of space technology, potential examples include:

- Very low Earth orbit small satellite design;
- Robotic arm operations for Mars sample handling;
- Defining electronic architectures for future ESA missions;

The length of the placement is 12 months.

Applicant Specification:

Due to the wide range of potential concepts the student is required to have an open mind and be highly adaptable. A knowledge of Space technology and systems is helpful but not mandatory. Desirable traits include:

- Ability to autonomously research a field of science or technology that is unknown to the student and supervisor in order to understand the key challenges and opportunities;
- A desire to learn a diverse range of modelling skills as required such as optics, thermal management, orbital mechanics, etc;
- An appreciation of business in engineering;
- Ability and willingness to give presentations in meetings / conferences;
- Comfortable at both working alone and working in small teams of up to five;
- Ability to write & review coherent and structured reports;
- Experience in project working and building prototypes;
- Good skills with MATLAB and Excel;
- Familiarity with CAD software and robotics operation software.

Applicants should be working towards (or should have attained) a degree-level qualification in a subject related to the nature of the placement (for example; Aerospace, Electronic Engineering, Mechanical Engineering, Robotics, Physics, Space studies).

Further details

1 year fixed term contract to be agreed with successful candidate – the start date will be in 2018 and will be dependent on Company requirements and the availability of the successful candidate.

Salary is £1,600 per complete month (additional terms & conditions will apply)

Closing Date for Applications: 16th February, 2018

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