The Company
Oxford Space Systems is a multi-award-winning space technology business developing novel deployable spacecraft structures that are lighter, less complex and lower cost than those in current commercial demand.

Our vision is to become the global leader in deployable antennas for space. By working with leading academic and commercial collaborators, we’re developing genuinely innovative deployable antenna solutions for the world’s leading satellite builders.

Based at the Harwell Science and Innovation Campus - the UK's Space Cluster - Oxford Space Systems enjoys access to world-class facilities including our own purpose-built facility which houses Harwell site’s largest cleanroom.

Background
Our Engineers work within a project team delivering against customer requirements. Led by a Project Manager along with a Project Engineer the projects are managed within a work package framework.

As a Mechanical Engineer you will be responsible for developing technical solutions for mechanisms/motion structures addressing structural and thermal aspects to satisfy project requirements.

You may have a strong design or analysis background but it’s unlikely you will have been exposed to all the duties and skills listed below.

At OSS we don’t wish to label you with a prescribed discipline, we want you to develop and grow as an individual as we expose you to new areas of engineering.

Position: Mechanical Engineer (Design, Analysis, Mechanisms and/or Systems)

Main duties:
- Develop clear understanding of customer requirements and impact on designs to determine sensitivities, resolve technical issues/requirements/design solutions with customers pragmatically and efficiently
- Design of mechanisms/deployable structures from concept stage up to detailed design and/or perform analysis (mechanical-structural, thermal and dynamic-vibration) to support deployable structures projects
- Trade off technical solutions
- Preparation of thorough and detailed reports which focus on the verification of requirements
- Writing and maintenance of technical documentation such e.g. VCD, DDVP, ICD, technical budgets, assembly and test plans
- Input into internal and customer reviews e.g. KO, PDR, CDR, and readiness reviews
- Provide technical support to procurement, assembly and test activities
- Manage configuration of all designs (control of BOM)
- Assist in the definition of model philosophy

Depending on the demands of the business and your experience you may be working on discrete engineering tasks or as a work package manager or potentially as the Project Engineer for exceptional candidates.
Job Description

Mechanical Engineer

As a Project Engineer, a set of additional responsibilities specific to the project to which you are assigned would include:

- Work with Project Manager and the Product Assurance manager as the core project delivery team
- Have primary design authority and accountability
- Technical leadership of multi-disciplinary project team (Mechanical, Electrical and RF)
- Lead, define and deliver the verification process including owning verification documents against customer requirements

Skills and Experience:

- Familiarity with one or more of the following: mechanical, thermal, mechanism, electrical systems, systems engineering
- Experience with one or more of the following: concept design, gears, motors and mechanisms, static, thermal, thermo-elastic and random vibration analyses
- The ability to quickly understand new technical concepts is essential
- Demonstrable experience of working within multi-disciplined team
- Adherence to and enforcement of deadlines and project costs
- Experience in a similar role within a regulated industry (Space, Nuclear, Aerospace, Automotive) typically:
  - 2 to 5 years
  - 5 to 15 years (for a senior Engineer)
  - 15+ years (for a principal Engineer)
- Previous experience of the Space Industry (at least 1 to 2 years) or a strong desire to work in the space industry is essential.
  - Familiarity with ECSS standards highly desirable
- It is essential that the candidate should have a strong Bachelor’s degree-level qualification in Mechanical engineering from a reputable university. Additional postgraduate (Masters or above) education is preferred, especially if relevant to space engineering.
- Experience with software packages for mechanical design and/or structural analysis, thermal analysis and mathematical modelling (e.g. SW professional, FEMAP, NASTRAN, ADAMS, Matlab etc)
- Proficient in the use of Microsoft Office software

Personal:

- Demonstrate a clear and logical “common sense” approach to problem solving
- Good interpersonal skills
- Excellent written/verbal communication and presentation skills
- Self-motivated to meet objectives
- Ability to work both alone and in teams as required by the individual task
- Ability to work within defined timescales to meet programme milestones
- Ability to work on several projects at any one time
- Driven by technical challenges, problem solving and practical implementation of new ideas
- Willingness to learn and share knowledge with other members of the team
- Ability to gain SC clearance (Be resident in the UK for at least 5 years) is preferred

If you are interested in working with Oxford Space Systems at this exciting point in the OSS story please email your CV and covering letter to jobs@oxford.space with the job title you are applying for shown clearly in the Subject line of the email. Please note that only suitable candidates will be contacted. If you are not successful, your data will be destroyed within six months of your application. We may ask to retain your CV for future opportunities.