Space Project Manager

Full Time
Grade 9, 3 Year Fixed Term
Walton Hall, Milton Keynes

About the role

The Open University has an excellent reputation for developing and delivering Space project activities including initial development, the design building and test, delivery and operation of space instruments in orbit. Notable past examples include Beagle-2, Cassini-Huygens and Rosetta. This activity sits within the School of Physical Sciences and covers a number of research activities, primarily space instrumentation including the Centre for Electronic Imaging.

The Faculty has secured external funding to complete projects for a number of upcoming space missions including Euclid, JUICE, Athena, SMILE, THESEUS and WFIRST, all of which contain elements of funding for project management. These projects are cross-disciplinary, involving integration of the science, electronics, mechanics, and digital domains and involve extensive testing and calibration of instrumentation and the provision of supporting documentation to ESA and NASA standards. The projects require strict management to ensure adherence to externally-set schedules with significant cost implications for any overrun.

Key responsibilities

1. Under the direction of the academic staff, is responsible for the strategic planning of the space instrumentation group operations, identifying innovative and appropriate solutions in order to meet current and future requirements and constraints, taking account of current and planned environment in the School, Faculty, University, UK and internationally to ensure the appropriate service delivery and sustained funding and resource to maintain viability and strength, and maintaining and strengthening the University’s profile in space research.

2. Provides leadership, oversight and co-ordination of project management activities within the space instrumentation group with specific emphasis on operational activities and their relationship with scientific research programmes. Advises senior academics/Principal Investigators on strategic issues regarding project management and, when requested, provides advice to the wider School and Faculty on project issues.

3. Takes responsibility for creation and maintenance of the complex project plans, understanding of the complex technical aspects (of the varied technology projects), managing suppliers (where virtually all major procurements require internal sole source justifications).

4. Is responsible for direct communications between the local project team, the funding agency (e.g. UKSA, ESA, NASA), and the collaborators in the supply chain such as industry, other government research labs, or other academic institutes). These communications may be on financial, managerial, schedule (including reporting any slippages and their consequences), or technical.
5. Supports the academic staff in the strategic development of the engineering and technical capabilities of the space instrumentation group and CEI in order to increase its competitiveness in future projects. This will require active involvement in activities including contract management, spacecraft quality and management systems and engineering. The post holder will need to ensure they maintain familiarity with current developments in relevant methodologies and techniques.

6. Responsible for ensuring appropriate resources are scheduled in a timely manner, resolving resource conflicts, and identifying gaps which require additional resource.

7. Liaise and co-ordinate with the Laboratory teams (the largest being the CEI), other technical staff and project managers (internal and external) to ensure that a broad overview of activity is maintained.

8. Liaise and negotiate with external bodies nationally and internationally (funding bodies, space agencies, industrial partners, and collaborating scientific institutes) to promote and extend the University’s space-related activities. Works with the School Director of Research, the Faculty’s Research & Business Support team and Associate Deans, and the University’s Commercial Legal Services to ensure the successful submission in proposal form, and subsequent running of grants and contracts.

9. Pursue contract research projects within the remit of the space instrumentation group as Principal Investigator or Co-Investigator. The role holder will play a significant role in the management and scientific direction.

10. Line manages project and technical staff

Person Specification on next page
Person Specification

Essential

- Degree in Science or Engineering
- Experience of project management of complex scientific instrument development, with demonstrable ability to work under pressure and to manage multiple high-stakes priorities
- Knowledge of project finances, reporting, obtaining income through grants and contracts
- Good understanding of mechanical design, electronics, space project test and qualification.
- Ability to think and operate strategically, with evidence of drive, adaptability and integrity, to make a leading contribution to delivery of strategic goals.
- Ability to lead, manage and motivate professional staff, developing and promoting team-working and best practice, to ensure timely delivery of project outputs.
- High level of interpersonal and negotiating skills demonstrated through engagement with senior expert professionals.
- Excellent and adaptable communication and influencing skills.
- Excellent analytical skills in relation to conceptual and numerical data from a wide range of sources, and excellent problem-solving skills.
- Ability to perform work out of normal office working hours (to meet the demands of the space projects, e.g. during test campaigns at remote sites, etc)
- Willingness to travel to other countries in support of meetings, testing, etc.

Desirable

- PhD in Science or Engineering
- Project management qualification
- Financial management training
- Experience working on ESA or NASA space projects
- Experience with MS Project or other equivalent scheduling software
About the Unit

Faculty of Science, Technology, Engineering & Mathematics

The Faculty of Science, Technology, Engineering and Mathematics (STEM) is comprised:

- School of Computing & Communications
- School of Environment, Earth & Ecosystem Sciences
- School of Engineering & Innovation
- School of Life, Health & Chemical Sciences
- School of Mathematics & Statistics
- School of Physical Sciences
- Knowledge Media Institute
- Deanery including teams supporting Curriculum, Research and Enterprise, Laboratory Infrastructure and Faculty Administration

“We aspire to be world leaders in inclusive, innovative and high impact STEM teaching and research, equipping learners, employers and society with the capabilities to meet tomorrow’s challenges”

The Faculty of STEM consists of 2500 staff including 1,800 Associate Lecturers. The Faculty delivers over 185 modules across undergraduate and postgraduate curriculum, supporting nearly 19,000 students (full time equivalents) which is 29% of the OU total.

The Faculty generates more research income (circa £17M) than any other Faculty in the University, supported by a comprehensive laboratory infrastructure.

We are proud of our distinctive values and capabilities underpinning our aspiration:

We are inclusive:
- We transform people’s lives, ensuring STEM education is openly accessible to many thousands of students from diverse backgrounds – our students express high satisfaction with their study experience.
- We engage the public in exciting citizen science and engineering, including through free open educational resources, multi-platform broadcasting, outreach to inspire the next generation and with programmes to encourage more women into STEM.

We are highly innovative:
- We are at the forefront of innovative developments in teaching practical science and engineering at a distance, through simulated and remote access laboratories and practical experimentation.
- Our high quality teaching and curriculum are informed by world-leading research, strong links with professional bodies and communities of practitioners, as well as by scholarship focused on continuously improving our STEM pedagogy.

We deliver significant social and economic impact:
- We provide STEM higher education at a scale and reach unsurpassed in the UK, with a sizeable international reach and further growth potential.
- We inject transferable STEM skills and knowledge direct into the workplace for immediate employee and employer benefit, as students combine study while working.
• The employability value of our courses is underpinned by accreditation from leading STEM Professional Bodies and Learned Societies, as well as partnerships and sponsorship with leading employers.

• Our high quality, applied and academically relevant teaching and research addresses real-world issues, delivering impact for industry and society, including addressing pressing STEM skill-shortages across the UK.