

Electrical engineer job specification

Magdrive is looking to hire an electrical engineer to help develop a revolutionary, next-generation spacecraft propulsion system. The Magdrive propulsion system delivers an unmatched level of thrust (>100 mN/kg) with extraordinary efficiency (>2000 s) that will unlock new capabilities for spacecraft and enable entirely new industries in satellite servicing, orbital assembly and interplanetary transport.

You will play a pivotal role as one of the first employees of Magdrive, which brings enhanced freedom, responsibility and potential for career growth. The solutions you develop will directly shape the development of the Magdrive propulsion system and have a significant impact on the future of space travel. You will be responsible for the development of the control and power systems. This will require novel approaches in design and use of materials in order to minimize weight while achieving the desired performance.

Responsibilities

- Lead on the design, procurement and assembly of PCBs and electronic components
- Developing the thruster power management and control systems
- Assisting in diagnostics development for experiments

Essential

- Higher degree in electrical engineering or similar (MSc or PhD)
- Experience in circuit and PCB design
- Experience with embedded systems
- Passion for space travel and for taking a bold approach to a transformational technology
- Fast and effective problem solving skills
- Ability to work under pressure to tight deadlines
- Strong communication and interpersonal skills

Desirable

- Experience with pulsed power and high voltage (1 - 5 kV) electronics
- Experience working with space hardware
- Knowledge of electric and chemical spacecraft propulsion
- Experience with CAD

Benefits

- Salary £30k - £50k per annum (DOE)
- One of the first hires of an ambitious new space company
- 25 days annual leave + bank holidays
- Flexible and remote working
- Support for home office setup
- Generous share options scheme