

Bradford Engineering B.V., a Bradford Space subsidiary, is a Netherlands-based supplier of Attitude and Orbit Control Systems (AOCS), Propulsion, Avionics and Thermal solutions for spacecraft. Our expertise in the field of satellite propulsion covers the entire range from cold gas, gas feed systems for electrical thrusters, to chemical propulsion. To the lead the development of our propulsion products, we are seeking a:

SYSTEM ENGINEER (CHEMICAL PROPULSION)

For the satellite product lines of

BRADFORD ENGINEERING

We are looking for a System Engineer for chemical propulsion subsystems to join Bradford Engineering B.V., a Bradford Space subsidiary, based in the Netherlands and manufacturer of products for the global space industry.

Your role

The System Engineer is the technical responsible for the product, ensuring that the overall design, analyses, tests, verifications, and qualifications are in line with the customer's requirements. The System Engineer is a key member of the Core Team and closely working together with the other project Core Team members (Program Manager, Product Owner and Product Assurance Engineer). The Core Team takes on the project from the initial concept all the way to delivery of the final product. Throughout the project, the Core Team manages external communication with the customer and major subcontractors, as well as internally with colleagues in charge of manufacturing, assembly, integration and testing and design and analysis support. The System Engineer is responsible for all technical aspects of these systems.

In the preliminary phases the System Engineer is responsible for technical trade-offs and understanding the customer's requirements. During the design phase, the System Engineer works together with the design department (CAD, structural, thermal and electrical) to ensure the design is well executed. As part of the activities, the design must be analyzed with functional and systems engineering analyses. During the procurement and the manufacturing, assembly, and integration phase the System Engineer will be required to support possible changes in the design, assembly procedures and non-conformances. During the test phase it will be required to write appropriate test plans and procedures to support the verification of equipment and customer requirements. The Systems Engineer is also expected to take on some of the testing activities him/herself, especially in cases where the product is non-standard.

Key responsibilities

- Review customer documents and execute design choices.
- Manage technical support for analyses.
- Support the schedule and associated budget.



- Perform functional analysis and system design tasks.
- Review mechanical designs, structural and electronics design.
- Creating documents for the data packages for the different reviews (EQSR, PDR, CDR, TRR, TRB), e.g.: User Manual, Qualification Status list, Compliance Matrix, Verification Control Document, functional analyses, assembly and test procedures, test reports, etc.
- Support on supply chain and production department with technical content.
- Creating assembly and test procedures.
- Test coordination with the test department.
- Giving technical support to Production and Technical responsible for Test phases in the project.
- For technical related matters the System Engineer is the contact person towards the customer.

Essential skills

- MSc degree in Aerospace Engineering, Mechanical Engineering, Chemical Engineering or equivalent.
- At least 3 years of industrial experience in the role as System Engineer for chemical propulsion subsystems.
- Demonstrated understanding of fluid system design concepts and operations.
- Solid knowledge of common concepts, practices and procedures in the field.
- Basic knowledge in mechanical systems design, structural and thermal analyses, materials and testing.
- Strong analytical mindset.
- Excellent verbal and written communication skills.
- Proficiency in (technical) English (C1).

Strongly valued/desired skills

- Knowledge on ECSS and Space Design Process Flow (EQSR, PDR, CDR, MRR, TRR, TRB, DRB).
- Knowledge on the current technology status and market related to spaceflight components.
- Hands-on experience with component- and system-level testing.
- Experience managing suppliers and subcontractors.
- Intermediate in Dutch (B1).
- Driving license and willingness to travel on an occasional basis.

What we can offer in return

We offer a varied job close to the hardware in an exciting industry where you play a big part, in the provision of innovative solutions for satellites in a global market, with a generous number of holiday days and a very international working environment.

Duty station

Heerle, in Noord Brabant, the Netherlands. Heerle is located few minutes from Roosendaal and Bergen op Zoom, 30 minutes drive from Breda and Dordrecht, and 50 km from Rotterdam and Antwerp. Possibility to live in Belgium while working at Bradford.

The role is open to candidates of any age, gender, orientation, who have or can get a work authorization within the EU.