

Job Title: Structural Engineer

Req ID 6001 - Posted 21/03/2018



EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Technology, Engineering and Quality.

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. Applications from women are encouraged.

Post

Structural Engineer

This position is classified A2-A4 on the Coordinated Organisations' salary scale.

This position forms part of ESA's Advance Recruitment Scheme which is established to provide appropriate staffing resources when requirements materialise. Appointments are therefore made for an initial duration of two years upon which the selected candidate may be appointed to a permanent post in the Agency.

Location

ESTEC, Noordwijk, The Netherlands

Description

Structural Engineer in the Structures Section, Structures, Mechanisms and Materials Division, Mechanical Department, Directorate of Technical, Engineering and Quality.

The Structures Section provides functional support to ESA projects and carries out technological research (R&D) in the field(s) of mechanical systems, structural design and verification, manufacturing, structural dynamics and application of lightweight structures.

Duties

Reporting to the Head of Section and within the technical fields described above, the main tasks and responsibilities of the post holder will include:

- participating in feasibility studies for the preparation of specifications and analysis of industrial proposals;
- providing functional support to approved spacecraft and payload projects and conceptual and feasibility studies in relation to all aspects of mechanical systems and configuration, structural design, analysis and mechanical testing;
- identifying critical development problems and assisting in their resolution, which includes evaluating complete mechanical systems;
- performing structural analysis as required to support the development of structure subsystems;
- participating in major reviews of spacecraft, launchers and payloads;
- establishing and evaluating specifications for the development and qualification of spacecraft system and subsystem structures with respect to defining requirements for environment-induced loads, model development philosophy and relevant verification methods;
- participating in the definition and execution of Agency standards and technology R&D programmes with special emphasis on mechanical system and configuration aspects, lightweight structures, structural dynamics and advanced structural materials technologies;
- supporting activities on structural integrity, evaluation of loads during the life of the structures and their impact in overall verification, including establishment of specifications, design, analysis, inspection and testing;
- supporting concurrent design activities regarding mechanical systems aspects;
- monitoring applicable scientific and technological trends and maintaining a state-of-the-art expertise;
- contributing to the dissemination of the results of activities performed and the transfer of knowledge across the Agency.

Technical competencies

General background and specific experience in the technical domains covered by the position

Hands-on hardware experience

Project support experience in a relevant domain

Experience with Space Engineering Standards and their preparation and implementation

Understanding of related technologies, R&D trends and the industrial landscape

Experience in the preparation of procurement activities for technology development and innovation (statements of work, proposal evaluation, etc)

Management and monitoring of industrial activities (interfaces with industry, reviews, etc)

Behavioural competencies

Communication

Teamwork

Continuous Learning

Innovation & Creativity

Customer Focus

Results Orientation

Planning & Organisation

Education

Applicants for this post should have a Master's degree in mechanical or aeronautical engineering.

Additional requirements

Applicants should have a good knowledge of spacecraft, payload, equipment and mechanical systems, in particular in respect to space vehicles structures. A good knowledge of advanced methods of structural design, development and verification (analysis and mechanical testing) of spacecraft, payload, equipment and launchers is also required. Some years of experience in spacecraft/payload structures development and structural analysis, as well as with concurrent engineering, spacecraft conceptual/feasibility studies and interfaces with other spacecraft system disciplines is an asset.

Other Information

For behavioural competencies expected from ESA staff in general, please refer to the ESA Competency Framework.

The working languages of the Agency are English and French. A good knowledge of one of these is required.

Knowledge of another Member State language would be an asset.

The Agency may require applicants to undergo selection tests.

The closing date for applications is 18 April 2018.

If you require support with your application due to a disability, please email contact.human.resources@esa.int.

Please note that applications are only considered from nationals of one of the following States: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, the United Kingdom, Canada and Slovenia.

According to the ESA Convention the recruitment of staff must take into account an adequate distribution of posts among nationals of the ESA Member States. When short-listing for an interview, priority

will first be given to internal candidates and secondly to external candidates from under-represented Member States.
(<http://esamultimedia.esa.int/docs/careers/NationalityTargets.pdf>)

In accordance with the European Space Agency's security procedures and as part of the selection process, successful candidates will be required to undergo basic screening before appointment.

Recruitment will normally be at the first grade in the band (A2); however, if the candidate selected has little or no experience, the position may be filled at A1 level.