

Job Title: Systems Engineer

Requisition ID 10790 - Posted 21/12/2020



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 Systems Engineer

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

Location
ESTEC, Noordwijk, The Netherlands

Description

Systems and CDF Engineer in the Systems and Concurrent Engineering Section (TEC-SYE), Systems Engineering Division (TEC-SY), Systems Department (TEC-S), Directorate of Technology, Engineering and Quality.

The Section provides functional support to ESA projects, performs feasibility studies on potential future space missions using the Concurrent Design facility (CDF) and carries out technological research (R&D) in the fields of systems and concurrent engineering, as well as developing design models and methodologies.

Duties

Reporting to the Head of Section and within the technical fields described above, you will have among your principal tasks and responsibilities:

- providing expert technical support and consultancy to ESA projects, programmes and studies in the systems and concurrent engineering fields throughout all project phases;
- participating in feasibility studies, project reviews and evaluation of project proposals;
- identifying project-critical development issues problems and assisting in their resolution;
- developing and improving tools and methods for systems and concurrent engineering;
- contributing to the improvement of standardisation in systems engineering;
- developing and promoting digitalisation of systems engineering, model-based systems engineering (MBSE) and infusing them into projects;
- contributing to the definition of technology development work plans and activities for ESA's Technology programmes;
- defining, initiating and managing R&D activities covering both long- and short-term needs;
- proposing, developing and encouraging new applications of the concurrent engineering approach, fostering multidisciplinary activities with an emphasis on innovative concepts, cutting-edge technologies and systems architectures;
- monitoring scientific and technological trends for systems and concurrent engineering and maintaining the corresponding state-of-the-art expertise;
- participating in TEC Competence Domain (CD) activities;
- contributing to improving the knowledge of systems and concurrent engineering across the Agency and for its partners;
- supporting the Directorate's activities as requested within your field of competence;
- contributing to the transfer of knowledge across the Agency.

Duties may also include supporting other activities requiring systems engineering skills.

Technical competencies

General background and specific experience in the technical domains covered by the position
Project support experience in a relevant domain

Spacecraft systems design

Systems engineering

Model Based Systems Engineering methodologies and tools

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)

Experience with Space Engineering Standards and their preparation and implementation

Behavioural competencies

Communication

Teamwork

Customer Focus

Innovation & Creativity

Problem Solving

Results Orientation

Continuous Learning

Education

A Master's degree in engineering or physics is required.

Additional requirements

Knowledge of the following technical domains is required:

- Solid background in space spacecraft systems and architecture design,
- Several years experience in systems engineering, mission analysis and design, design methodologies and system modelling,
- Concurrent engineering processes and related IT tools/infrastructure, mission feasibility studies
- Space project life-cycle, including mission/system conceptual design and trade-offs, requirements management, reviews, verification engineering.

Ability to work independently and establish good working relations within the Agency.

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 01 February 2021.

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 and Canada, Latvia 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.