Job Title: Young Graduate Trainee for Avionics

Req ID **8536** - Posted **16/04/2019**

EUROPEAN SPACE AGENCY

Young Graduate Traineeship Opportunity in the Directorate of Space Transportation.

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
Young Graduate Trainee for Avionics
This post is classified F1.

Location
ESRIN, Frascati, Italy

Our team and mission
The Avionics team of the Vega and Space Rider Development Programme:

- manages the development of Avionics/Electronics, Software and GNC activities of the VEGA Space Transportation System (including VEGA launcher in exploitation, VEGA-C launcher for Larger Payloads, SSMS for Smaller Payloads, Spacer Rider Vehicle for Payloads Return, VENUS for Higher Orbits and VEGA-E for future evolutions);
- drives the Design to Payload concept of the Spacer Rider Vehicle and its Payload Cargo Bay, targeting a commercial exploitation;
- coordinates the Vega-C Launcher Electrical Interfaces (RF, harness, Database, etc) in coherence with the Vega-C Launch System needs (namely the Launch Base and Launch Range stations).

Interested candidates are encouraged to visit the ESA website: http://www.esa.int

Field(s) of activities
The Young Graduate Trainee (YGT) will contribute to the supervision of:

- The Vega-C Launcher System Phase D (Qualification and production), particularly the follow-up of:
  - Avionics System tests campaigns, namely HWIL (HardWare-In-the-Loop tests, addressing the interoperability of the overall avionics architecture).
  - Avionics equipment qualification test campaigns with the assessment of test results exploitation.
  - Avionics System Requirements Verification Synthesis, ensuring that the verification process (Equipment tests, System tests (e.g. HWIL), simulations, analysis, etc) has demonstrated that the design, including margins, meets the applicable requirements.

- The Space Rider Avionics system Phase C (Detailed Definition), particularly:
  - Payload Cargo Bay Design, namely supporting:
    - The design to Payload implementation (ensuring that Payload needs are meet by the Space Rider System Service). In this frame, the YGT may be involved into Payload needs survey activities.
    - The consolidation of Payload Cargo Bay technical budgets, Payload Services and technical interfaces, as well as the preparation of the Space Rider User Guide.
  - Space Rider Avionics architecture design and equipment Detailed Design activities.

Technical competencies
Knowledge of relevant technical domains
Relevant experience gained during internships/project work
Breadth of exposure coming from past and/or current research/activities
Knowledge of ESA and its programmes/projects

Behavioural competencies

Self Motivation
Communication
Continuous Learning
Cross-Cultural Sensitivity
Teamwork

Education

Applicants should have just completed, or be in their final year of a University course at Masters Level (or equivalent) in a technical or scientific discipline with specialization on Electrical Systems and with background on the Software domain.

Additional requirements

The following will be considered an asset:

- Technical background on Space Engineering
- Knowledge of Space Transportation Systems, in particular of the Launchers domain
- Familiarity with SW engineering tools (e.g. Matlab, etc)
- Motivation for:
    - Space Avionics/electronics developments
    - Test engineeringTelecommunications (CCSDS, etc) and
    - Data handling protocols (1553, SpaceWire, etc)

Applicants must be fluent in English and/or French, the working languages of the Agency. A good proficiency in English is required.

In addition to the above competencies, applicants should demonstrate good interpersonal skills and the capacity to work both independently and as part of a team.

During the interview the candidates' motivation and overall professional perspective/career goals will also be explored.

Other information

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

The closing date for applications is 2 May 2019.

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, and the United Kingdom. Nationals from Slovenia, as an Associate Member, or Canada as a Cooperating State, can apply as well as those from Bulgaria, Cyprus, Latvia, Lithuania and Slovakia as European Cooperating States (ECS).
Priority will first be given to candidates from under-represented Member States.

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