

Job Title: Young Graduate Trainee for EO System Simulation Engineering

Req ID 3703 - Posted 19/01/2018



EUROPEAN SPACE AGENCY

Young Graduate Traineeship Opportunity in the Directorate of Earth Observation Programmes.

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 EO System Simulation Engineering

This post is classified F1.

Location

Noordwijk

Our team and mission

The role of the Future Missions Division is to prepare the Earth observation (EO) missions and technologies of the future, encompassing a wide range of scientific missions (Earth Explorers) and operational missions (Copernicus Sentinels and Meteosat/Metop). The work carried out is mainly related to the end-to-end definition of space missions, including orbits, instruments, platforms, end-to-end performance, data flow, launcher interfaces, and ground processing to meet the observation requirements. The definition is carried out in close cooperation with specialists in the different domains as well as with the scientists and/or data users proposing the mission or expected to use its results.

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

Field(s) of activities

The Young Graduate Trainee (YGT) will support the work of the division in the definition, development and exploitation of System Engineering Tools suitable for the preliminary analysis and sizing of future EO missions. In particular the Young Graduate Trainee will perform the following activities:

- Participate to the development of new System Engineering Tools for preliminary analysis and sizing of future EO missions, ensuring a coherent and representative modelling of each element of the system, (satellite/platform and its subsystems, payload, ground processing) contributing to the system performance
- Participate to the evolution of the existing System Engineering Tools used in EOP-ΦM,
- Use the above System Engineering Tools for system trade-offs, preliminary sizing and performance evaluation of a selected set of future EO missions,
- Provide feedback from mission optimisation to the spacecraft and mission design.

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 (e.g. Space system engineering).

Additional requirements

Experience in modelling and simulation of observing system characteristics (spacecraft, optical and/or microwave payload, ground processing, orbit/mission analysis...) would be an asset. Applicants should have knowledge of Microsoft Excel, Matlab and/or Python programming.

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.

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

Other information

For behavioural competencies expected from ESA staff in general, please refer to the [ESA Competency Framework](#).

The closing date for applications is 04 February 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, and the UK, or Slovenia as an Associate Member, Canada as a Cooperating State, 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