

## Job Title: Young Graduate Trainee for Galileo Signals and Receivers Engineering

Req ID 3862 - Posted 26/01/2018



### EUROPEAN SPACE AGENCY

Young Graduate Traineeship Opportunity in the Directorate of Navigation.

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 Galileo Signals and Receivers Engineering

This post is classified F1.

#### Location

ESTEC, Noordwijk, The Netherlands

#### Our team and mission

The Young Graduate Trainee (YGT) will be part of the Galileo System AIV Unit, Galileo System Procurement Service, Galileo System Office, Galileo Programme Department, Directorate of Navigation.

The European Space Agency in cooperation with the European Union is developing the Galileo system. Galileo will be an independent, global, European-controlled navigation satellite system.

The Galileo Programme Department is responsible for the design, development and validation of the Galileo Satellite Navigation System, consisting of the Galileo Space, Ground and User Segments.

The Galileo System Procurement Service within the Galileo Programme Department is tasked with maintaining the overall system requirements baseline, performance budgets and developing and executing the System and Service verification plans.

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

#### Field(s) of activities

The Young Graduate Trainee will be involved in the Galileo project in the areas of Galileo/GNSS receivers and user performance assessment and Galileo System and Receiver evolution. As part of his/her contribution to the system team tasks the applicant will support the System Integration and Validation Team to address one or more of the following topics:

##### Galileo/GNSS receivers and user performance assessment in real environment

- preparation and development of field test campaigns with Galileo experimental receivers
- preparation and development of laboratory test campaigns with simulated and real GNSS signals
- performance assessment of Galileo receivers in real environments
- performance assessment of multipath and interference impact in real scenarios

##### Navigation signal and receiver robustness

- Research and experiment with new signal and message structures considering how they contribute to receiver robustness including new system-user concepts based on authentication
- Research and test threat models related to so-called Evil Waveforms including possible detection and mitigation concepts
- Research into interference, jamming and spoofing mechanisms including new detection and mitigation methods

#### 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 one of the following Engineering or Science disciplines: aerospace engineering, geodesy, telecommunications engineering, mathematics or physics.

#### Additional requirements

A good knowledge of Global Satellite Navigation Systems, Navigation receivers as well as GNSS performance parameters is required. Knowledge of Safety of Life Systems, RINEX as well as solid background in real data processing for GNSS systems and software development would be highly desirable. Familiarity with GNSS augmentation systems or advanced receiver autonomous integrity monitoring would be an asset.

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. In addition, 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 11 February 2018.**

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