

## Training Opportunity for “Young Graduate Trainees”

Reference	Specialist Area	Duty Station	Closing Date
ESA/YG-ESOC(2005)008	Navigation Support	ESOC(DE)	15 December 2005

### Overview of the Division missions

Under the direct authority of the Head of the Ground Systems Engineering Department, the Navigation Support Office develops and runs the in-house satellite based navigation facilities and provides support to projects requiring this expertise from an operational point of view. It further promotes innovation in this field of expertise for ground segment applications by participating in scientific and technical networks in Europe and worldwide and conducts leading-edge research. The Office operates a state-of-the-art Navigation Facility in the ESOC Operations Control Centre.

Current activities include:

- Navigation support for the European Galileo and EGNOS projects;
- Development, maintenance and operation of the ESA IGS (International GNSS Service) Analysis Centre and associated GPS/Glonass ground station network; additional support to the IGS (Governing Board, Working Groups);
- On-board GNSS (navigation of satellites using Global Navigation Satellite Systems), including evaluation of flight experiments;
- Precise orbit determination and modeling for ESA Earth orbiter missions carrying advanced tracking systems;
- A number of projects funded by (non-ESA) third parties in the field of navigation, including development, validation and operations;
- Development of the requisite software packages and other infrastructure (stations, Navigation Facility).

### Overview of the field of activity proposed

The YGT will be assigned a task in one of the following areas, in each case involving working in a small team:

- Participation in the design of future navigation mission control systems in the area of orbit determination, space geodesy and time synchronization, and applications of such systems.
- Participation in development and validation of systems for ground processing of data from orbiting GPS receivers.
- Participation in activities in support of the IGS.

### Required Education

Applicants should have just completed, or be in their final year of a University course at Masters level in mathematics, natural sciences or engineering. Some knowledge of orbital dynamics, estimation methods, modeling, space mission analysis, software engineering and unix environments would be an asset.

Candidates must be fluent in English or French, the official languages of the Agency.

### How can I apply?

Please fill in the [online](#) application form.

*The YGT Scheme is open to recently qualified young men and women who are nationals of one of the following states:  
Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the UK, or Canada as a Cooperating State, and Hungary and the Czech Republic as European Cooperating States (PECS).*