

Training Opportunity for Belgian Trainees

Reference	Title of Training Opportunity	Duty Station
BE-2020-SCI-FE	PRODEX Programme - Instrumentation	ESTEC

Overview of the unit's mission:

Reporting to the Future Missions Department, in the Directorate of Science, the PRODEX Office implements the PRODEX Programme. PRODEX is an optional Programme of ESA devoted to the development of scientific instruments and experiments for space science missions. The development may involve industry and/or scientific institutes and may cover either a full instrument or instrument contributions or subsystems. Currently PRODEX implements Instruments or Instrument subsystems developments for a number of missions, including JUICE, PLATO Phases C-D, ARIEL, LISA, ATHENA, COMET INTERCEPTOR Phases A-B1 etc.

Overview of the field of activity proposed:

The Trainee could support PRODEX Technical Officers monitoring the technical development for above-mentioned instruments or other instrument subsystems.

The work would consist in supporting he technical officers, including the following tasks:

- · verifying and updating specifications
- reviewing technical documentation (e.g. design reports, models etc)
- · reviewing test procedures, attending verifications
- · when required, supporting in sub-system characterisation tests in ESTEC labs
- reviewing technical proposals, schedules and development plans
- · identifying potential problem areas and proposing remedial actions
- supporting preparation and execution of Project reviews and review processes
- cost estimation and cost statistics (payload developments)

Required education:

- Master-level Degree in a technical or scientific discipline, or PhD (Physics or Instrumentation-related)
- Previous exposure to Space Instrumentation development, use of statistical methods, exposure to/ interest in project costing would be an asset;
- · Scientific Instrumentation subsystems: optics, detection, electronics, (at least one of these)
- · [Scientific Instrumentation] System engineering and AIV
- Mechanical and thermal
- · Interest in project cost and cost control aspects
- Good interpersonal and communication skills;
- Ability to work in a multi- cultural environment as part of a team;
- Fluency in English and/or French, the working languages of the Agency; ability to communicate in English is required;
- Belgian nationality is a mandatory condition.