

## Training Opportunity for Belgian Trainees

Reference	Title	Duty Station
BE-2018-TEC-EDD	High Frequency DC/DC converter module with Digital Control	ESTEC

### **Overview of the unit's mission:**

The [On-Board Computer & Data Handling](#) section (TEC-EDD), part of the Data Systems and Microelectronics division within the Technical and Quality Management Directorate is responsible for project support and technology development of space applications for all that concerns On-board Computers (OBC) and Data Handling (essentially space-borne control and data handling computers, avionics, mass memories, data and command & control busses).

The section is, besides activities related to the specification and validation of OBCs and Data Handling, also actively involved in the design of the required building blocks. These elements must comply with high reliability and availability requirements combined to specific immunity to the space environment, in particular related to radiation induced effects. The section can rely also on a laboratory facility that allows hands-on work.

### **Overview of the field of activity proposed:**

The objectives of this topic are:

To develop an Array Power Regulator (APR) DC/DC converter module for the Primary Power System.

To reach a switching frequency of at least 600 kHz. The end target is 1MHz.

To implement the control system of the converter with a digital device.

### **Required education:**

Applicants should have just completed, or be in their final year of a University course at Masters level in a technical or scientific discipline.

Applicants for this post should have an education in electronics, computer science, telecommunications or equivalent.

Applicants need to be fluent in English or French, the official languages of the Agency.

Applicants should have good interpersonal and communication skills and should be able to work in a multi-cultural environment, both independently and as part of a team.