## Overview of the unit’s mission:

The ISS Facility and Technology team is responsible for keeping the Columbus experiment facilities in good working order so that they can fully support the on-orbit science activities. More information can be found at [http://www.esa.int/Our_Activities/Human_Spaceflight/Columbus](http://www.esa.int/Our_Activities/Human_Spaceflight/Columbus). Specifically we:

- develop ISS Research Facility evolutions and enhancements (e.g. EDR Video Management Unit);
- develop exploration technology demonstration systems (e.g. ACLS, ANITA, MiDASS, TARZAN) to be flown on board the ISS in preparation for human exploration missions;
- provide integration and sustaining engineering support to ISS Operations Team (HREOO) to maintain ISS operations including procurement of all the hardware required to support the sustainability of the on-orbit infrastructure of ESA systems;
- support the resolution of anomalies of ESA’s on-orbit ISS Research Facilities;
- perform engineering activities related to ISS lifetime extension.

## Overview of the field of activity proposed:

In line with his/her specific technical background, the trainee would be involved in specific areas of the business of the unit, therefore being exposed to end-to-end development of space hardware development (from establishment of requirements to final acceptance of the hardware/software), sustaining engineering (troubleshooting on board issues and identify optimal solutions).

One area of interest is also the evolution of the existing on-orbit infrastructure to a different type of utilisation, different than what initially conceived, and the introduction of commercial utilisation of the ISS infrastructure under ESA’s responsibility.

As there are many technology activities the trainee will have the possibility to continue in his/her area of expertise or familiarise himself/herself with activities in one or more types of technical areas, e.g. life support, avionics, mechanical and/or fluidic systems.

In other words a broad spectre of technical, strategic and management (industry interaction) tasks are possible. A trainee with a high motivation will get the chance to be exposed to most areas of activities.

## Required education:

University degree in engineering.