

EUROPEAN SPACE AGENCY

Digital Signal Processing Engineer

Job Req ID: 12963

Closing Date: 24 November 2021

Publication: Internal & External

Vacancy Type: Permanent

Date Posted: 27 October 2021

Description

Digital Signal Processing Engineer responsible for the ESA ground station modems. This position is in the Station Subsystems & Configuration Control Section, Ground Station Engineering Division, Ground Systems Engineering & Innovation Department, Directorate of Operations.

Duties

If appointed to this role, you will report to the Head of the Station Subsystems & Configuration Control Section and, your work will include the following tasks:

- Ground station modems: driving the design, industrial development, testing and validation supporting deployment and helping to resolve operational problems;
- Upgrading and managing the addition of the new functionalities to the ground station modems, according to space mission needs;
- Supporting Galileo modem development;
- Performing new ground station back-end development so as to move towards a software-defined radio system;
- Providing optical modem development;
- Supporting technical standardisation in the domain of space communication (modulation, ranging and coding) for international standardisation (CCSDS);
- Supporting the definition of future communication solutions and associated technological developments in close cooperation within ESA, as well as with industry and international partners.

Technical competencies

Digital signal processing (e.g. FPGA, receiver algorithms)

In-depth knowledge of communication systems and modems (RF)

Design, implementation and validation of modems

Software-defined radio systems

Leading technology development & innovation activities

Experience in managing industrial contracts

Behavioural competencies

Result Orientation

Operational Efficiency

Fostering Cooperation

Relationship Management

A Master's degree in telecommunication engineering, electrical engineering or an equivalent field is required.

Additional requirements

A good background in space communication systems is desirable;

Knowledge of optical communication systems is an asset;

End-to-end project management experience of complex technical systems, from design deployment.

You must be eligible to obtain security clearance from your national security authority.