

# Young Graduate Trainee for Technical Facility Management

**Job Req ID:** 12132

**Closing Date:** 15 June 2021

**Publication:** External Only

**Vacancy Type:** Young Graduate Trainee

**Date Posted:** 18 May 2021

Young Graduate Trainee Opportunity in the Directorate of Internal Services

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. We therefore welcome applications from all qualified candidates irrespective of gender, sexual orientation, ethnicity, beliefs, age, disability or other characteristics. Applications from women are encouraged.

This post is classified F1.

## **Location**

ESOC, Darmstadt, Germany

## **Our team and mission**

The ESA Estates & Facilities Management (EFM) Department is responsible for the management, operation and development of ESA's common corporate and technical infrastructures and facilities in accordance with evolving ESA requirements, for the provision of specialist support to Heads of Establishment and Centres to ensure compliance with applicable legislation and ESA policies, and for the management of contracted Facilities Management services, such as site maintenance, physical security, fire and rescue coverage, catering, cleaning, landscaping, general services and business travel.

The future of facility management is digital. The Internet of Things (IoT) and Artificial Intelligence (AI) with their innovative technologies enable optimised, intelligent management of facilities in different areas.

You will report to the Head of the ESOC EFM Technical Management Section, and will support the first initiation of IoT and AI applied to FM at ESOC.

Interested candidates are encouraged to visit the ESA website: <http://www.esa.int>

## **Field(s) of activity/research for the traineeship**

You will contribute to:

- digitising maintenance processes at ESOC
- developing a high-level roadmap with the required steps and phases to implement and use IoT and/or AI to optimise the maintenance process and the management of ESOC facilities, as well as to improve the services delivered by FM at ESOC
- producing a detailed course of action for the automation of simple routine monitoring tasks in FM Hard and Soft Services, as well as in Security, according to the above-mentioned IoT/AI roadmap.
- leading the implementation of the above-mentioned automation of simple monitoring tasks

More specifically, your tasks will include:

- surveying in detail the existing data available in ESOC's Computer-Aided Facility Management (CAFM) system, including the Maintenance schedules, Master Protocols and Procedures

- creating digital checklists in CAFM
- integrating label code readers in CAFM
- drafting possible IoT/AI FM processes related to (but not limited to):
  - HVAC predictable maintenance
  - optimised digitalised cleaning service
  - smart building
  - smart access control
  - space management
  - energy monitoring
- producing and implementing automation and routine monitoring tasks
- surveying existing sensor/actuator locations and types of the various systems
- evaluating and interpreting data collected from the various systems.
- liaising with IoT/AI consulting/engineering/expert companies
- considering the evolution of the existing Building Management System (BMS) in line with the AI/IoT implementation plan.

### **Technical competencies**

Knowledge of relevant technical domains

Relevant experience gained during internships/project work

Breadth of exposure coming from past and/or current research/activities

Knowledge of ESA and its programmes/projects

### **Behavioural competencies**

Result Orientation

Operational Efficiency

Fostering Cooperation

Relationship Management

Continuous Improvement

Forward Thinking

### **Education**

You should have just completed, or be in the final year of a university course at Master's Level in a technical or scientific discipline.

### **Additional requirements**

- Good knowledge of MS Excel and/or database
- Understanding how a Computer-Aided Facility Management system (CAFM) operates
- Knowledge of office automation tools and European standards and regulations relating to technical installations
- Good knowledge of mechanical, electrical and control engineering
- Knowledge of basic principles of IoT and AI

You 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.

The working languages of the Agency are English and French. A good knowledge of one of these is required. Knowledge of another Member State language would be an asset.

During the interview motivation and overall professional perspective/career goals will also be explored.

### **Other information**

For behavioural competencies expected from ESA staff in general, please refer to the [ESA Competency Framework](#).

At the Agency we value diversity and we welcome people with disabilities. Whenever possible, we seek to accommodate individuals with disabilities by providing the necessary support at the workplace. The Human Resources Department can also provide assistance during the recruitment process. If you would like to discuss this further please contact us email [contact.human.resources@esa.int](mailto:contact.human.resources@esa.int).

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Please note that applications are only considered from nationals of one of the following States: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, and the United Kingdom. Nationals from Latvia and Slovenia, as Associate Member States, or Canada as a Cooperating State, can apply as well as those from Bulgaria, Cyprus, Lithuania and Slovakia as European Cooperating States (ECS).

Priority will first be given to candidates from under-represented Member States.

In accordance with the European Space Agency's security procedures and as part of the selection process, successful candidates will be required to undergo basic screening before appointment