

Job Title: Intern in the ISS Operations and Astronaut Group

Req ID 8850 - Posted 11/10/2019



EUROPEAN SPACE AGENCY

Internship Opportunity in the Directorate of Human & Robotic Exploration Programmes.

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. Applications from women are encouraged.

Post

Intern in the ISS Operations and Astronaut Group

Location

EAC, Porz-Wahn, Germany

Our team and mission

Under the direct authority of the Director of Human and Robotic Exploration Programmes, the Leader of the ISS Operations and Astronaut Group shall:

- Act as the operational service provider towards the Research and Utilisation Group (HRE-R) to ensure timely, efficient and successful implementation of the ISS Utilisation Programme;
- Define the Operational Sustaining Engineering functional requirements to support the operations of the Columbus System, Infrastructure and Payloads;
- Provide leadership for the training, medical, crew, ISS operations and Ground Segment teams and the European Astronaut Corps;
- Represent ESA in the ISS Multilateral Crew Operations Panel (MCOP);
- Reinforce the role of the European Astronaut Centre (EAC) as a hub for astronauts in the promotion of human spaceflight in general, in reference to the utilisation of Low Earth Orbit and for Human Exploration.

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

Internship activities and learning areas

1) **Topic 1: Space Medicine Team:** Internships are offered with the REDI (Research, Education & Development Initiative) that supports medical domain readiness both for current and future human space missions. For detailed information please click here: [EAC Internships](#)

2) **Topic 2: Space Training Team – Media Production:** Multimedia internships at the EAC offer exciting opportunities for producing video (filming and editing with Premiere) and media (2D and 3D: Adobe CC) to support Astronaut Training, E-Learning and more. Some current projects require knowledge of orbital mechanics (rendezvous and docking) and experience in the Learning Management System Moodle. For detailed information please click here: [EAC Internships](#)

3) **Topic 3: Space Training Team – CAVES** (Cooperative Adventure for Valuing and Exercising human behaviour and performance Skills) and PANGAEA (Planetary ANalogue Geological and Astrobiological Exercise for Astronauts): Electronic Fieldbook (EFB) System Development. The EFB is a tool supporting astronaut mission operations with technology for geolocation, cave mapping, scientific data gathering, sensors interaction and wireless data relay to mission control centres. Interns are sought to support the development of this exploration tool in order to improve, extend and test its functionalities. For detailed information please click here: [EAC Internships](#)

4) **Topic 4: Space Training Team – CAVES/PANGAEA:** Machine learning for recognition of planetary materials from multispectral datasets. Interns are sought to continue development of machine learning algorithms for recognition of planetary materials from multispectral datasets. This project focuses on combining several mineral characteristics to achieve automatic classification. For detailed information please click here: [EAC Internships](#)

5) **Topic 5: Space Training Team – CAVES/PANGAEA:** Planetary Mineral Database Development and Validation of Spectra Classification Methods. Interns are sought to continue to enhance and develop our mineralogical database through gathering spectra from mineral collections and museums. They will also help in the testing of a Machine Learning software to evaluate the most suitable spectral identification method of planetary materials. For detailed information click here: [EAC Internships](#)

6) **Topic 6: Ground Segment and IT:** The GS & IT team holds full responsibility of all systems that support EAC's International Space Station control rooms as well as many other business critical IT systems. As an intern on the team, you will work to support the team and EAC, by developing bespoke and valuable software tools. With many years of experience in multiple fields of engineering and IT, the team is well prepared to mentor interns through challenging projects that will have a real impact on services at EAC. For detailed information please click here: [EAC Internships](#)

You can select the topic you wish to apply for during the online application process.

Competencies

Communication
Continuous Learning
Cross-Cultural Sensitivity
Self Motivation
Teamwork

Education

Applicants should preferably be in their final or second to last year of a University course at Masters Level (or equivalent) in a technical or scientific discipline.

Additional Requirements

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.

Other information

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

The closing date for applications is 30 November 2019.

If you require support with your application due to a disability, please email contact.human.resources@esa.int.

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 Slovenia, as an Associate Member, or Canada as a Cooperating State, can apply as well as those from Bulgaria, Cyprus, Latvia, Lithuania and Slovakia as European Cooperating States (ECS).