

Training Opportunity for Belgian Trainees

Reference	Title	Duty Station
BE-2016-HRE-AG(1)	Spaceship EAC – Robotics & Additive Manufacturing	EAC
<p>Overview of the unit's mission:</p> <p>Within the Directorate of Human Spaceflight and Robotic Exploration, the European Astronaut Center (EAC) at Cologne, Germany, hosts the European astronaut corps and is responsible for astronaut training and astronaut medical operations. In order to prepare for future (human) space exploration missions, EAC created the "Spaceship EAC" project, which aims at developing technologies and concepts relevant for exploration on the Moon.</p> <ol style="list-style-type: none"> 1. ISRU (In-Situ-Resource-Utilisation); 2. Automation, robotics and human factors; 3. Additive manufacturing processes; <p>The implementation of related projects is often done in cooperation with institutes of the German Aerospace Center (DLR), which has its headquarters and major facilities surrounding the EAC in Cologne, and with other external European partners.</p>		
<p>Overview of the field of activity proposed:</p> <p>The focus of the proposed activity for a Belgian Trainee is to support EAC activities within the frame of the "Spaceship EAC" initiative in particular in the area of teleoperations and additive manufacturing. These activities are in line with future exploration roadmaps and exploration scenarios that EAC will partake in. The activity will encompass:</p> <ul style="list-style-type: none"> • Familiarisation with the "Spaceship EAC" project and - as far as relevant – with ESA's exploration technology programme; • Simulation of aspects relating to lunar exploration, with a particular focus on topics relating to human surface exploration scenarios; • Support the ongoing 3d printing activities at EAC, as well as initiating new projects within this domain in line with Spaceship EAC objectives • Develop the teleoperation capability at EAC in collaboration with ESA partners <p>The activities under the "Spaceship EAC" project are executed by a team of students under the supervision of a Research Fellow and with support from the greater EAC team.</p>		
<p>Required education:</p> <p>Applicants should have just completed, or be in their final year of a University course at Masters Level (or equivalent) in a technical or scientific discipline.</p> <p>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.</p> <p>Skills of particular interest are in the area of robotic systems as well as CAD tools, such as AutoCAD or Solidworks, and direct experience with 3d printing technology and its applications.</p> <p>Applicants must be fluent in English and/or French, the working languages of the Agency. A good proficiency in English is required.</p>		