

Training Opportunity for Belgian Trainees

Reference	Title	Duty Station
BE-2018-HRE-XE(1)	Spaceship EAC – Robotics and Human Interaction	EAC
<p>Overview of the unit's mission:</p> <p>Within the Directorate of Human Spaceflight and Robotic Exploration, the European Astronaut Centre (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> <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 National Trainee (NT) activity is to support EAC activities within the frame of the "Spaceship EAC" initiative in particular in the area of future mission concepts relating to robotics, human-machine interaction (HMI) and support systems around these areas. These activities are in line with future exploration roadmaps and exploration scenarios related to possible human exploration beyond LEO. The NT activity will encompass:</p> <ul style="list-style-type: none"> • Familiarisation with the "Spaceship EAC" project and - as far as relevant – with ESA's technology programme and exploration strategy; • Support the initiative and the centre in its activities relating to robotics, in particular the MARVIN project, a cooperative remote control of a UGV rover system remotely from various ESA sites • Support the development of internal activities relating to control of robotics systems within the planned EAC analogue site (LUNA), due to be operational in 2019 • In conjunction with other EAC personnel, support activities in the domain of HMI and mission control systems relating to MARVIN and other robotics projects at EAC <p>Many of the activities under the "Spaceship EAC" initiative are executed by a team of students under the supervision of dedicated ESA personnel and with support from the greater EAC team. The successful candidate would be integrated into the Spaceship EAC team, and experience a dynamic innovative working environment focusing on enhancing and enabling the centre to address future exploration challenges.</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>A candidate is sought with educational experience/skills relating to robotics, mechatronics and programming (embedded systems and network level programming). Hands on experience within these domains that are relatable to this NT opportunity are particularly desirable.</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>		