

Training Opportunity for Belgian Trainees

Reference	Title	Duty Station
BE-2018-DG-SE(1)	CubeSat System Engineering	ESEC
<p>Overview of the unit's mission:</p> <p>The ESA Education Office has the objective to use space as a theme to enhance the literacy of young people in science and technology and to motivate students from ESA Member and Associate States to prepare to pursue a space related career. In support of achieving its educational objectives, the Office offers to university students, in the frame of the ESA Academy programme:</p> <ul style="list-style-type: none"> • a number of opportunities to gain hands-on involvement in space-related projects, including satellite projects, and experiments to be conducted on dedicated platforms reproducing special environmental conditions (such as sounding rockets, stratospheric balloons, drop tower facility, hyper-gravity centrifuge, and parabolic flights). These activities enable a transfer of knowledge, offer an insight into professional processes and promote the development of relevant scientific and technical skills and competences. • a portfolio of training sessions, in all areas of ESA's expertise, delivered at the ESA Academy's Training and Learning Centre, to complement what they are learning at university and to better prepare them for a space-related career. <p>The Office works in close cooperation with ESA specialists from different directorates, industry experts, university institutions and other research organisations.</p>		
<p>Overview of the field of activity proposed:</p> <p>We are currently managing the second edition of Fly Your Satellite! programme (FYS) for university students' CubeSats, with six CubeSat missions being supported, and more CubeSat teams expected to join the programme in 2018. You will support the following activities related to CubeSat projects:</p> <ul style="list-style-type: none"> • Engineering and coordination activities for FYS: <ul style="list-style-type: none"> ○ System engineering activities, e.g. through review of project technical documentation. ○ Interface with ESA technical and quality experts, in order to assist in the identification and resolution of critical technical issues. ○ Project planning and progress tracking, and preparation of ESA management and technical documentation for project reviews, for ESA internal and for outreach purposes. ○ Coordination of programme workshops and training activities organised for participating university teams. ○ Coordination of all project activities, which may include project reviews, concurrent engineering studies, verification/test campaigns, launch campaign preparations, launch and mission operations. ○ Coordination of the university student teams and the university project follow-up. • Operation of infrastructure/facilities at the ESA/ESEC CubeSat Laboratory, aimed at organising integration and test campaigns for university CubeSat teams in a cleanroom environment. Your tasks will include: <ul style="list-style-type: none"> ○ Familiarise with laboratory control and test equipment (e.g. cleanroom control, vibration shakers, shock table, thermal-vacuum chamber). ○ Support the coordination and preparation of CubeSat test campaigns. ○ Provide engineering support to facility operators and student teams during satellite test campaigns (i.e. functional tests, vibration tests, thermal-vacuum tests, ...). ○ Assist in the maintenance of the test equipment and the cleanroom. <p>In addition, you will have the chance to attend several training courses for university students organised in the framework of the Training and Learning Programme.</p> <p>You may also contribute to other educational opportunities created by the ESA Education Office.</p>		
<p>Required education:</p> <p>Applicants should have a background in an engineering field, preferably with a strong orientation in space technology, with a good general understanding of satellite systems engineering aspects. Past experience or knowledge of CubeSat systems will be considered an asset.</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>Applicants must be fluent in English and/or French, the working languages of the Agency. A good proficiency in English is required.</p>		