Redu Space Services
CUSTOMIZING SATELLITE SOLUTIONS

Education Team

STEM Technology & Didactics Engineer

RSS-4-HRMGT-NTE-0029

Redu Space Services (RSS) has a vacancy for a member of the Education Team at the **European Space Agency Security and Education Centre (ESEC), in Transinne (GALAXIA), in the Ardennes region of Belgium.**

As a member of the Education team, you will report directly to the Education Team Leader.

The RSS education team provides a broad range of services in support of the activities of the ESA Education Office at the ESA Education Training Centre in ESEC-Galaxia such as:

- Support to the ESA Academy, a programme with the objective to complement the portfolio of knowledge of university students to better prepare them for a space-related career:
    - Instructional design and coordination support for the Training & Learning Programme, which delivers a portfolio of training courses, in all areas of ESA's expertise, from space law and entrepreneurship to spacecraft engineering and human space physiology.
    - Engineering support to hands-on space-related projects, in particular CubeSat mission design, satellite assembly and test campaigns in the frame of the Fly Your Satellite! programme.
- Support to the STEM (Science, Technology, Engineering and Mathematics) programme for primary and secondary school teachers, including the operation of the e-Technology lab, a didactic laboratory which offers direct hands-on experience to teachers by using space robotics and space science as learning and teaching contexts.

Detailed information on the activities of the ESA Education Office can be found at: https://www.esa.int/education.

In this position you will:

- Support the delivery of all the ESA Education STEM programme activities for primary and secondary school teachers, including the teacher workshops at the e-technology laboratory.
- Develop exciting new activities and didactics content for teachers and pupils to learn about science and technology by using space technology as a teaching and learning context.

The main activities of the STEM Technology & Didactics engineer include:

- Support the STEM technology & didactics coordinator in the management of the ESA e-technology lab didactics and operations, including the design, production, testing and delivery of teacher training modules on technology and science subjects (e.g. robotics, coding, science investigation using technology tools, 3D modelling, etc.)
- Proactively liaising and networking with ESA, ESERO networks, academia & industry experts, such as ESA/ESERO technology related working groups.
- Contributing to the design and implementation of challenges and school projects related to technology (e.g. CanSat, AstroPi, others).

- Participate in the creation of training material, including hardware prototyping, exercise development and dry-runs, creation of supporting educational resources, and more.
- Supporting the calls for application and definition of selection processes.
- Maintenance of the training material and statistics databases.
- The adaptation of existing content, or development of new content, for use in upcoming novel digital platforms (e-learning) as well as for future formats/initiatives defined by the ESA Education Office.
- Participating in procurement processes related to the development of new training activities.
- Promoting and contributing to other education activities and initiatives carried out by the ESA Education Office.

Ideal candidates will meet the following criteria:

- Be a national of a Member State of the European Union
- Fluent in spoken and written English; Knowledge of French is an asset.
- Have a master's degree in Engineering, Science, Education, or equivalent qualification.
- Strong interest in education activities, and in the field of science and technology in general.
- At least 2 years of experience in a relevant role.
- Demonstrated experience in teaching and in preparing/delivering presentations to a large audience.
- Knowledge of consumer-level hardware and software tools for robotics, programming, 3D printing applications and others (e.g. Arduino, Python, Fusion 360, Tinkercad, …), as well as aptitude for learning and keeping up to date with novel tools and hardware that can be used for teaching.
- Experience with e-learning and/or emerging classroom platforms is a strong asset.
- Prior knowledge of one of the following disciplines is an asset:
    - 3D CAD modelling
    - Machine Learning / AI
    - Augmented / Virtual Reality
- Experience in space-related projects is an asset.
- Creativity is an essential aspect of this role.
- Candidates will be expected to have good organisational and reporting skills, as well as a strong proactive, self-starter and autonomous attitude, which is a must for the successful development and delivery of multiple activities in parallel.
- Strong capacity to learn and adapt as well as an excellent aptitude for resolving problems autonomously and diplomatically, as the successful applicant will be in direct contact with many different stakeholders, from a wide range of ESA staff at different levels, to representatives of academia, experts, industry, and ESA's international partners.
- The working environment is very international, multidisciplinary and has a strong focus on teamwork, therefore candidates are expected to be able to establish and maintain good working relationships with a variety of people from different nationalities and backgrounds.

If you wish to apply for this job opportunity, please submit your application (CV and cover letter) by email to marieve.bellot@reduspaceservices.com and jose.luis.fernandez@reduspaceservices.com