

Training Opportunity for Luxembourgish Trainees

Reference	Title	Duty Station
LU-2021-TEC-SYE	Systems Engineering	ESTEC
<p><u>Overview of the mission:</u></p> <p>The training opportunity is within the Systems Engineering Division of the Technical, Engineering and Quality Directorate and in particular in the Systems and Concurrent Engineering Section which is in charge of the following main activities:</p> <ul style="list-style-type: none"> • Manage and use the Concurrent Design Facility (CDF) to perform internal feasibility studies and design of potential future ESA missions; • Provide system engineering support to ESA programmes and projects in various phases of their development; • Conduct R&D activities related to system and concurrent engineering methodologies and tools; <p>Further information is available at http://www.esa.int/CDF</p>		
<p><u>Overview of the field of activity proposed:</u></p> <p>As part of the section, you will be involved in the following activities:</p> <ul style="list-style-type: none"> • Participation in multidisciplinary and inter-directorate activities for the assessment and conceptual design of future space missions for all ESA programmes. • Hands-on systems engineering support to CDF space missions studies and contribution to other activities such as facility development and maintenance. • Development of engineering tools, models and databases, including MBSE solutions for Concurrent Engineering processes and systems support to projects. • Contribution to the maintenance and evolution of the Concurrent Design Tool, including domain specific tools integration and interoperability across European concurrent design centres, using standardized approach based on ECSS-E-TM-10-25. • Participation in definition and preparation of new CDF applications, such as payload instrument modelling and design, System of System (SoS) architecting, anomalies investigation, reviews, technology roadmapping, lessons learned capitalisation. • Technical support to ESA system and project activities, including small satellite studies, in-orbit demonstration and technology activities, depending on your specific technical fields of expertise. 		
<p><u>Required education:</u></p> <ul style="list-style-type: none"> • Master's degree in engineering with preferably an aerospace background and/or specialization in System Engineering, Mission Analysis or other system-related disciplines. • Knowledge - and possibly experience in the usage - engineering tools (e.g. MatLab, STK, MathCad, Catia, etc.), as well as Object Oriented programming (e.g. Java), Scripting Languages (e.g. Python), Modelling Languages (e.g. SysML) with applications like MagicDraw, Enterprise Architect, etc. • Experience in office automation software (e.g. Excel, Visual Basic, Word, PowerPoint, etc.) • Good interpersonal and communication skills 		

- Ability to work in a multi-cultural environment, both independently and as part of a team
- Fluency in English and/or French, the working languages of the Agency