

## Training Opportunity for Swiss Trainees

Reference	Title	Duty Station
CH-2019-HRE-P	Earth Return Orbiter System Engineer	ESTEC
<p><b><u>Overview of the unit's mission:</u></b></p> <p>Phase B2/C/D of the spacecraft project life cycle (spacecraft design, development, procurement and verification phase).</p> <p>With-in the HRE-P department, the specific Project mission is the procurement, launch and operations of the Earth Return Orbiter, one of 3 flight elements of the flagship NASA/ESA Mars Sample Return Campaign; with the objective of returning Martian Samples to the Earth's surface, a top priority for the international planetary science community.</p>		
<p><b><u>Overview of the field of activity proposed:</u></b></p> <p>The candidate would be integrated into the Earth Return Orbiter System Engineering team and will assist the System Engineering Team Leader together with the System Engineering Team to:</p> <ol style="list-style-type: none"> <li>1. Assist with the preparation and maintenance of the spacecraft functional analysis in the framework of the project MBSE (model based system engineering)</li> <li>2. Assist with the implementation and maintenance of the DOORS (requirements) database</li> <li>3. Assist with the preparation and maintenance of the spacecraft performance budgets</li> </ol> <p>MBSE is a fundamental tool in coordinating technical information between ESA and NASA at Campaign level. MBSE allows for a consolidated and systematic method to connect, analyse and maintain functional and system requirements from Campaign down to subsystem level. Participation in this activity will expose the candidate to both the Campaign and Mission levels in both the mission and hardware domains.</p> <p>Exposure to spacecraft performance/system budgets will give the candidate first-hand experience of the spacecraft design process and the normal working relationship between ESA and Industry.</p> <p>Working in an ESA Project team will provide the candidate with a high value and rare experience for a trainee, exposing the candidate to both ESA and European spacecraft design processes.</p> <p>Being in a Project environment the trainee is expected to get involved and make value-adding contributions to the Project.</p>		
<p><b><u>Required education:</u></b></p> <p>Master's Degree in Engineering or Applied Physics;</p> <p>N.B.: A degree in aerospace engineering is not a requirement but motivation to work in the Space Sector is a pre-requisite, demonstrated by participation in targeted university courses or work related experience.</p>		