

Training opportunity for graduates/young professionals from Switzerland

Reference	Title	Duty Station
CH-2020-EOP-Φ-LI	EO Commercial Industrial Innovation	ESRIN
<p><u>Overview of the unit's mission:</u></p> <p>The Φ-lab in ESRIN aims to accelerate the future of Earth Observation (EO) by helping the European industry and research communities to rapidly adopt disruptive technologies including AI, distributed systems etc. The lab is split into two offices Φ Explore (Research focus) and Φ Invest (Commercial focus). Φ Invest aims to support and stimulate the European commercial earth observation sector through the Investing in Industrial Innovation (InCubed) programme.</p>		
<p><u>Overview of the field of activity proposed:</u></p> <p>Global competition is increasing with new entrants bringing new ambitions into the Earth Observation sector leveraging commercial opportunities with greater private sector involvement. Major technological shifts, such as digitalisation, miniaturisation, artificial intelligence or reusable launchers, are disrupting traditional business models in the space sector, reducing the cost of accessing and using space. The Earth Observation space sector needs to adapt to seize these business opportunities stemming from those changes so that Europe can maintain its leadership and strategic autonomy in the space domain.</p> <p>The Investment in Industrial Innovation (InCubed) programme is a new co-funded programme aimed to support and stimulate the newly emerging commercial earth observation market. Companies submit ideas to the open innovation platform (ideas.esa.int) and we invite them to pitch their ideas to us. If the ideas are good we invite them to submit a proposal which contains more information, which we evaluate against technical and commercial criteria. If the proposal is successful, then the company can start the activity. We work closely with the associated national delegations as they give permission to release the necessary co-funding and also ensure that the activities are in line with national objectives. The aim is that by the end of InCubed the company has at least a commercially focused minimal viable product or service.</p> <p>The scope of InCubed is end to end (upstream and downstream) and so we are helping to build satellites, systems, sub-systems, architectures, data platform and ground segments. We have activities across 14 different countries and some examples include:</p> <ul style="list-style-type: none"> • the development of an EO platform using EO data to maximise the yield of potatoes • An on-board optical modem for distributed systems, • A hyperspectral imager using AI for cloud detection on a cubesat • EO platforms using advanced data analytics to provide commercial services <p>We engage technical officers across ESA, who deal with the activities on a daily basis and the InCubed programme office follow the activities at a higher level, assuring that the activity is fitting within InCubed objectives and is commercially viable.</p> <p>In this context, you would support the InCubed programme office. You will be exposed to commercial earth observation companies, start-ups and SME's, work closely with InCubed programme office colleagues dealing with national delegations and proposal evaluation and development (both technical and commercial aspects). You shall be involved in InCubed process improvement and online website and communication aspects and will support InCubed promotional activities and events. You shall be part of the Φ-lab team and so relations with Φ-Explore are important. You will be an integral part of the InCubed team given their own responsibilities and tasks.</p> <p>You are encouraged to visit the ESA website: www.esa.int/esa</p>		

Required education:

- Master-level degree in an engineering, ICT, business or technical management discipline. e.g. engineering/technical discipline;
- Understanding of business, product/service development, commercial aspects, business administration;
- Experience with earth observation commercial products and services would be an asset;
- Open mind and a willingness to learn is needed to understand new concepts quickly ranging from optical, and Synthetic Aperture Radar (SAR), from satellite development to AI and cloud computing;
- Commercial understanding and basic business knowledge;
- Natural curiosity and an enthusiasm for a wide range of applications including AI, EO, and New Space
- Good interpersonal and communication skills;
- Ability to work in a multicultural environment, autonomously and as part of a team;
- Fluency in English and/or French, the working languages of the Agency.