



 École polytechnique fédérale de Lausanne

EPFL Why innovative programmes?



Many PhD students only start to really consider the question of "*what comes after my PhD?*" when they have finalized their thesis

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A very large majority of PhDs go to **non-academic sector** (leaders in industry, entrepreneurs, etc.), however many PhD supervisors have a purely academic background with little experience in the non-academic sector



To integrate **leadership and sustainability** into the curriculum of PhDs in order to develop the next generation of sustainable science lead

EPFL Goals of the innovative programmes

Increase PhD candidates' awareness – from the very beginning of their PhD studies – of the importance of career preparation, and provide the required training & network-building opportunities.





Sustainability and responsible leadership, and how to contribute to the transition towards a **sustainable society** based on technology and innovation

Increase exchanges and collaboration between EPFL laboratories and the non-academic sector – industry, start-ups, non-profit organizations - benefitting PhD students' future careers and society

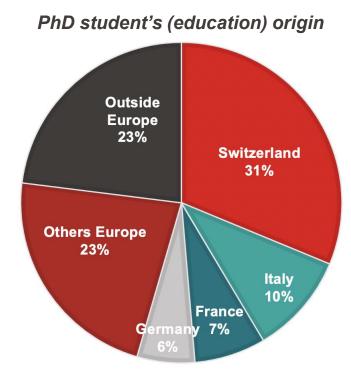
EPFL EPFL in a nutshell

One of the most cosmopolitan technical universities in Europe (> 120 nationalities)

- 12'000 students (incl. 2'200 PhDs)
- 350 professors
- 6'000 staff members (incl. PhDs)

A truly interdisciplinary Doctoral School

21 doctoral programmes - generally not attached to a single faculty - with course (ECTS) requirements, a 1st year exam, annual evaluations, thesis exam and thesis defense, and many other features



EPFL EPFLinnovators





Training and events focused on entrepreneurship

> A 6 to 24-months secondment generally at industry/start-ups

EPFL EPFLglobaLeaders



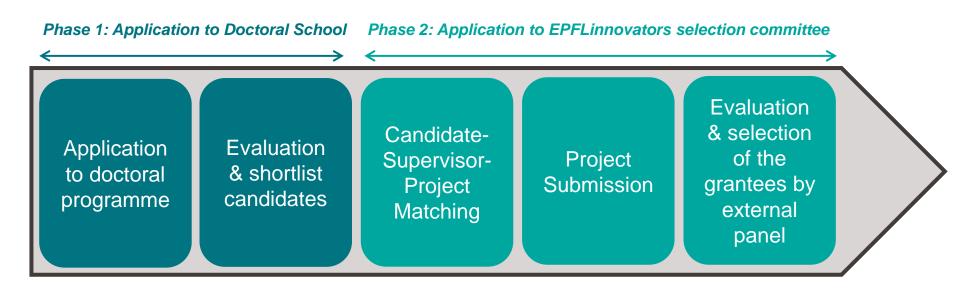
Training and events focused on leadership and sustainability

Laboratories and secondments (3 to 12-months) active in SDG fields

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RESEARCH CAREERS FOR SUSTAINABLE SOLUTIONS

EPFL EPFL innovators selection process



Highly competitive 1840 applications / 36 positions 20 countries



EPFL Why dedicated programmes are effective?

- Additional selection (2nd) phase:
 High quality of selected candidates
- Strong sense of community among the candidates (WhatsApp group, LinkedIn group, etc.)



Positive influence of the *EPFLinnovators* and *EPFLglobaLeaders* towards their peer PhD candidates concerning career preparation, transferable skills development, and networking

EPFL Some quotes of PhD candidates



«EPFLinnovators gives researchers first-hand experience in transferring knowledge to industry.»

Laura Hermans



«This programme provides great opportunities for me to work on the commercial aspect of my project. With the commercial partner on the side, my project will be guided in the right way to be useful at the end.» Mahdi Hamidi Rad



«It's really important for PhD students to interact with the 'real world' and not to be locked in the laboratory all the time.»

Harry Vourtsis

EPFL Acknowledgements

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Thank you for your attention!

Back-up slides

EPFL *EPFLinnovators* training programme

Technology transfer and Entrepreneurship skills (3 - 4 ECTS)

Teaching and Presentation skills (2 ECTS)

Technology and Public policy (2 ECTS)

Entrepreneurial Opportunity Identification & Exploitation (2 ECTS) Ethics, Social issues and Responsible Research and Innovation (RRI) (O ECTS)

My thesis in 180 seconds (1 ECTS)



EPFL *EPFLglobaLeaders* training programme

Leadership & Management 1 of 5 courses (2 to 4 ECTS each)

- Leading and managing in a global context
- Strategic marketing & technology commercialization
- Project management
- Data science for business
- Production management

Innovation 1 of 3 courses (2 to 4 ECTS each)

- Technology Transfer
- Economics of Innovation and Technological Change
- Business design for IT services

Sustainability 1 of 6 courses (2 to 5 ECTS each)

- Technology and innovation policies for global challenges
- Risk management and analysis (3 courses)
- Product lifecycle management concepts methods and tools
- Design thinking

Executive sustainability training (at partner institution such as IMD) 2 ECTS

My thesis in 180 seconds training 1 ECTS

EPFLglobaLeaders

14