Student project guide
ENV-491 Interdisciplinary project in sustainability

General guidelines

- You are encouraged to do your project towards the end of your Master cycle as the aim of the project is to apply knowledge and skills learned during the minor
- You can either join a project proposed by an EPFL unit, or propose yourself a project and find one or two supervisors
- You can do the project alone or in a group, at the autumn or spring semester
- You can do the project in English or in French according to agreement with your supervisors
- You should plan to work ~300 hours (about 1.5 days per week) on the project as it is worth 10 ECTS

Requirements for the project

- The topic is relevant for the minor, e.g. is related to engineering for sustainability, and is validated by the coordinator of the minor before the semester start.
- The project has an academic dimension and a research question
- An internal lecturer can supervise you

Steps to get started

At any point in the process, you can contact the coordinator Melanie Studer for help or advice if needed.

1. Identify a topic of interest

Some questions that may help you in identifying a project topic:

- Is there a general topic that interests you? → Search for the research labs working on this topic. The tool graphsearch and the EPFL search engine can help.
- Is there a course of the minor that you loved and would like to explore further? → Think of the subject you would like to further explore and contact the teacher to ask if it would be possible.
- Is there a Professor, lab or center (c.f. list below) which focus' attracts you? → Contact the Professor leading the lab or the coordinator of the center to ask if they have student projects.
- Is there an existing project from a lab, center or a MAKE project (c.f. list below) that attracts you? → Contact the person heading the project to ask if you could join the project.
- Do you have a topic of interest developed by an external partner (e.g. an enterprise, a public administration, an NGO)? → before detailed discussion, contact an EPFL professor to discuss this opportunity

Research laboratories involved in the courses of the minor

- Chair of Economics & Management of Innovation (CEMI) – Prof. Dominique Foray | CDM
- Chemical Processes and Materials (GR_LUD) – Prof. Christian Ludwig | ENAC
- Engineering and Technology for Human-Oriented Sustainability (ETHOS) – Prof. Andrew Sonta | ENAC
- Extreme Environments Research Laboratory (EERL) – Prof. Julia Schmale | ENAC
- Human-Environment Relations in Urban Systems (HERUS) – Prof. Claudia R. Binder | ENAC
- ICT for Sustainable Manufacturing Group (ICT4SM) – Prof. tit. Dimitrios Kyritsis | STI
- Industrial Process and Energy Systems Engineering (IPESE) – Prof. François Maréchal | STI
- Laboratory for Biological Geochemistry (LBE) – Prof. Anders Meibom & Dr. Stéphane Joost | ENAC
• **Laboratory for Processing of Advanced Composites (LPAC)** – Prof. Véronique Michaud, Dr. Yves Leterrier | STI
• **Laboratory of Atmospheric Processes and their Impacts (LAPI)** – Prof. Athanasios Nenes | ENAC
• **Laboratory of Environmental and Urban Economics (LEURE)** – Prof. Philippe Thalmann | ENAC
• **Laboratory of Inorganic Synthesis and Catalysis (LSCI)** – Prof. Xu Hile | SB
• **Laboratory of Molecular Simulation (LSMO)** – Prof. Berendt Smit | SB
• **Laboratory of Photovoltaics and Thin-films Electronics (PV Lab)** – Prof. Christophe Ballif | STI
• **Laboratory of Sustainable and Catalytic Processing (LPDC)** – Prof. Jeremy Luterbacher | SB
• **Solar Energy and Building Physics Laboratory (LESO-PB)** – Prof. Jean-Louis Scartezzini | ENAC
• **Structural Xploration Lab (SXL)** – Prof. Corentin Fivet | ENAC
• **Urban Sociology (LASUR)** – Prof. Vincent Kaufmann | ENAC

Relevant research centers
• **Centre for Climate Action and Impact (climAct)** – Dr. Nicolas Tétreault
• **EssentialTech** – Dr. Solomzi Makohliso

Relevant MAKE projects
• **AgriFood** – Max Polzin
• **Carbon removal** – Karl Khalil
• **Genorobotics** – Jonathan Selz
• **Re-use and Low tech in urban area** – Alexis Channel
• **Sail low tech** - Shan Yao
• **Swiss Solar Boat** – Robin Amacher

2. Find a supervisor
• For the project, you can be supervised by any internal lecturer. PhD students, collaborators in an EPFL central unit (e.g. EPFL sustainability) and teachers at another university can act as second supervisors if relevant.
• It is recommended to have two supervisors for group projects.
• To find supervisors, you can use graphsearch.epfl.ch by entering keywords on your topic of interest (for example “circular economy”, “carbon sequestration”, etc) and searching by “people”

3. Validate and register your project
• Send your project idea to the coordinator of the minor Melanie Studer (melanie.studer@epfl.ch) to validate it
• Once the coordinator has validated the project and its supervision mode, register it on IS-Academia

Calendar

The project is organized around the following indicative milestones:
1. **Topic choice**: You should choose your project topic before the start of the semester.
2. **Project validation**: Before or in the two first semester weeks, the project should be validated by the supervisors as well as the coordinator of the minor.
3. **Registration**: The registration deadline on IS-Academia is the same as for all other courses. You have to register your project in your study plan on IS-Academia.
4. **Mid-term report**: At the middle of the semester, a mid-term report or presentation should be delivered.
5. **Final report and deliverables**: The deadline for the project deliverables is one week after the end of the semester, unless agreed otherwise with the supervisor