

PENS-315

SKIL Student Kreativity and Innovation Laboratory

Cotture Samuel, Leonardi Claudio, Meibom Anders

| Cursus | Sem. | Type |
|------------------------|------|------|
| Projeter ensemble ENAC | BA6 | Opt. |

| | |
|----------------------|---------------------|
| Language of teaching | English |
| Credits | 4 |
| Withdrawal | Unauthorized |
| Session | Summer |
| Semester | Spring |
| Exam | During the semester |
| Workload | 120h |
| Weeks | 12 |
| Hours | 4 weekly |
| Courses | 1 weekly |
| Exercises | 3 weekly |

Number of positions

Il n'est pas autorisé de se retirer de cette matière après le délai d'inscription.

Summary

This course will allow students to engage in hands-on projects defined by themselves, in a dedicated workshop environment. Students work together in small groups on their own ideas, with access to a wide range of tools, materials, software, etc. - assisted by specialized coaches.

Content

There is no predefined task or assignment – students brain-storm, form groups, and decide between themselves what they want to do, how to start – then they do it. A lot of flexibility is provided for how the work should proceed, but the process typically includes: a brain-storming phase; a planning phase with definition of specific roles for each group member; an execution phase with continuous evaluation and adjustment of planning and strategy; and in the end a presentation of the project/results/products/methods developed - and the difficulties encountered. An interdisciplinary team of coaches - including students and faculty members - will provide guidance for the teams as needed.

Keywords

Workshop, creativity, hands-on, group work, interdisciplinarity

Learning Prerequisites**Required courses**

There is no special course requirement.
Anybody eligible for Projeter Ensemble can choose the SKIL experience.

Recommended courses

Other relevant EPFL courses include, for example, "Prototyping" (CdH) and "Design Thinking" (CdH & CdM).

Learning Outcomes

- Develop a project from idea to realization
- Specify the role of the team members and the team objective
- Make a physical or numerical prototype

- Define a planning to reach its goal

Transversal skills

- Set objectives and design an action plan to reach those objectives.
- Demonstrate a capacity for creativity.
- Communicate effectively with professionals from other disciplines.
- Communicate effectively, being understood, including across different languages and cultures.
- Continue to work through difficulties or initial failure to find optimal solutions.

Teaching methods

Personalized coaching in response to student needs and ideas.

Expected student activities

Hands-on realization of own ideas, for example in the form of prototypes, models, or methods. Students are expected to explore project ideas that go beyond their discipline.

Assessment methods

Each group will present the story of their project and its results.
This presentation will be evaluated and graded at the end of the semester.