

PENS-221

Making the campus of tomorrow

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Cursus	Sem.	Type
Projeter ensemble ENAC	BA4	Opt.

Language of teaching	English
Credits	4
Session	Summer
Semester	Spring
Exam	During the semester
Workload	120h
Weeks	
Hours	48 weekly
Courses	4 weekly
Exercises	22 weekly
Project	22 weekly
Number of positions	

Summary

The EPFL-UNIL campus is today at the heart of an intense institutional reflection on its future masterplan. The ENAC week aims to carry out specific actions on the campus (feasible in one week) starting from a reflection on public space and soil in relation to the challenges of climate change.

Content

The ENAC week will question with an interdisciplinary approach the relation between **open spaces and their thermal effect on neighboring built environment** -with for instance interest in possible energy harvestings- and it will make use of the contribution of different disciplines.

The ENAC week will include a first phase of **analysis and mapping**, based on the official documents and preparatory studies carried out by the team. Students will form interdisciplinary groups that will then design and carry out an **"action/project"** on campus, scheduled for the second phase of the week. In a logic of urban and interdisciplinary acupuncture, these projects will have to contribute to rethink certain (open) spaces on campus, and possibly to act as **prototypical actions** for the construction of tomorrow's campus. They could thus be considered as complementary to the campus master plan, that reflects on a different scale.

The week is organized and will be supervised in partnership with the services of EPFL and especially "EPFL Sustainability" which will ensure the proper integration of the projects in the urban policy of the campus. The students will, thus, have the opportunity to confront a **real client** and to realize a project by managing, in an accelerated way, all the stages of the building site.

Keywords

Campus, Public Spaces, Heat Islands, Soil, Thermal Performances, Ecosystem Services

Learning Outcomes

By the end of the course, the student must be able to:

- Realize quantitative analysis with technical instruments
- Analyze data from different sources
- Integrate different disciplines and know-hows
- Elaborate proposals for light projects according to the technical possibilities available
- Manage different stages of a building site

Transversal skills

- Use a work methodology appropriate to the task.
- Communicate effectively with professionals from other disciplines.
- Demonstrate the capacity for critical thinking
- Demonstrate a capacity for creativity.
- Access and evaluate appropriate sources of information.
- Plan and carry out activities in a way which makes optimal use of available time and other resources.

Teaching methods

The course will consist in two main part:

- An interdisciplinary fieldwork and mapping campaign, in which the students, supported by the teachers, will experience (on site) and map (draw and critically analyze) some open spaces of the campus, both through some measurement and thermal analysis and through qualitative analysis of the space. The maps produced will be commented by the students (work in groups) and will open to the second part of the course;
- The realization of some actions/interventions in the campus open spaces, according to the analysis realized and the discussion we will have with the EPFL-UNIL services.

Assessment methods

A final presentation in which the students present their work will conclude the course and guide the evaluation. A 2-page synthesis report is also requested from each project group and will be elaborated after the ENAC week.

Resources

Bibliography

The bibliography will be communicated at the beginning of the ENAC week.