



2EL1860 – Building the city - Town planning, architecture and engineering

Instructors: François Cointe, Frédérique Delmas-Jaubert

Department: DÉPARTEMENT MÉCANIQUE ÉNERGÉTIQUE PROCÉDÉS

Language of instruction: FRANCAIS

Campus: CAMPUS DE PARIS - SACLAY

Workload (HEE): 60

On-site hours (HPE): 35,00

Elective Category : Engineering Sciences

Advanced level : No

Description

Raise awareness among students about the problems of building the city: what do we build and for whom?

- To master the fundamental concepts and role plays of the construction through case studies, as well as the tools of the engineering at the service of the act of building and to make want to deepen in more detailed courses
- Introduce them to the diversity of trades necessary for the act of building
- Make them aware of the scientific and technical barriers that limit value creation

Quarter number

SG8

Prerequisites (in terms of CS courses)

none

Syllabus

Introduction to main challenges of the cities facing the climate evolution + choice of the territory to be studied.

2 and 3 : history of Paris and Grand Paris, by François Cointe

4 : urban and architectural visit

5 : Grand Paris Express, works of the century

6 : cities climate, means of action

7 : public spaces and adaptation to climate change

8 : urban engineering and urban services

9 : report delivery for territorial studies

10 and 11 : architecture, real estate and private stakeholders



Class components (lecture, labs, etc.)

Lessons + in situ lessons (visits)

Grading

Students are graded on a case study carried out mainly in tutorials, including assessment of attendance and participation in tutorial sessions + architectural study of a building.

Course support, bibliography

Institut Paris Région <https://www.institutparisregion.fr/documents-historiques-de-reference.html>

APUR–Atelier Parisien d’URbanisme <https://www.apur.org/fr>

Pavillon de l’arsenal–espace d’exposition de la Ville de Paris sur l’architecture et la ville <https://www.pavillon-arsenal.com/>

Cité de l’architecture et du patrimoine <https://www.citedelarchitecture.fr/f>

Resources

Team : François Cointe, Ulisse Vizzardi, Didier Lourdin, Olivier Ledru, Frédérique Delmas Jaubert

Learning outcomes covered on the course

At the end of this lesson, the student will be able to:

- Know and understand the main paradigms of the construction of the city
- Identify the economic and non-economic stakeholders of a construction project and its challenges
- Distinguish the principals, funders, designers, builders, and operators
- Know and understand the associated value chains of real estate, construction and urban services
- Compare the positions of the main companies in the sector and their innovation logic