

AR-497

Building design in the circular economy

Bastien Masse Maléna, Fivet Corentin

Cursus	Sem.	Type
Architecture	MA1, MA3	Opt.
Minor in Engineering for sustainability	H	Opt.
Minor in Integrated Design, Architecture and Sustainability	H	Opt.
Territories in transformation and climate minor	H	Opt.
Urban Planning and Territorial Development minor	H	Opt.

Language of teaching	English
Credits	3
Session	Winter
Semester	Fall
Exam	Written
Workload	90h
Weeks	12
Hours	2 weekly
Courses	2 weekly
Number of positions	

Summary

The class introduces the concept of circular economy and its applications to building design, with a focus on design with reused components, design for disassembly, and life-cycle assessment. The class develops critical thinking skills over and above theoretical and technical inputs.

Learning Outcomes

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

- Assess / Evaluate current circular practices and design methods
- Critique current circular practices and design methods
- Characterize current circular practices and design methods

Teaching methods

The course alternates flipped classrooms with traditional delivery.

Expected student activities

Students are expected to:

- attend and enliven all classroom sessions;
- prepare classroom sessions by reviewing selected texts and case studies;
- write an essay (one over the semester).

Assessment methods

Grades reflect both the student's activities during the semester and the final examination.

Resources**Moodle Link**

- <https://go.epfl.ch/AR-497>