

HUM-398

**Design for sustainability II**

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Cursus	Sem.	Type
Humanities and Social Sciences	MA2	Obl.
UNIL - Autres facultés	E	Opt.
UNIL - Géosciences	E	Opt.
UNIL - HEC	E	Opt.

Language of teaching	English
Credits	3
Withdrawal	Unauthorized
Session	Summer
Semester	Spring
Exam	During the semester
Workload	90h
Weeks	14
<b>Hours</b>	<b>3 weekly</b>
Project	3 weekly
<b>Number of positions</b>	<b>60</b>

**It is not allowed to withdraw from this subject after the registration deadline.**

**Remark**

Une seule inscription à un cours SHS+MGT autorisée. En cas d'inscriptions multiples elles seront toutes supprimées sans notification. S'inscrit dans le programme TILT (<https://go.epfl.ch/tilt>).

**Summary**

This course explores and practices some of the fundamental tools of designing for sustainability with a focus on the sustainability, desirability, and economic viability of solutions.

**Content**

See the full description in the autumn semester course - HUM-397: Design for sustainability I.

During the spring semester, sessions are devoted to the prototyping of a solution through a project-based approach.

Lecturers provide guidance on semester projects on a regular basis.

Teams will be made up of engineers (EPFL), industrial designers (ECAL), and social scientists (UNIL)

As part of the TILT program, there will be one online and asynchronous workshop per semester aimed at strengthening professional competences (interdisciplinary and team work, etc.). Students will be asked to keep a logbook as a basis for their individual reflexive note.

**Keywords**

design process, desirability, viability, sustainability, prototyping, interdisciplinarity, project-based learning

**Learning Prerequisites****Required courses**

HUM-397: Design for sustainability I

**Learning Outcomes**

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

- Apply an iterative prototyping approach to test the sustainability, desirability, economic viability of a project
- Develop an innovative and sustainable project through ideation techniques
- Estimate the potential impact of a sustainability-driven project

### Transversal skills

- Communicate effectively with professionals from other disciplines.
- Take account of the social and human dimensions of the engineering profession.

### Teaching methods

- Group work under regular lecturer supervision

### Expected student activities

- Work in interdisciplinary teams
- Attend regularly project consultations
- Design a solution through prototyping
- Document and valorize the processes of designing for sustainability

### Assessment methods

- Project and documentation: 80% (groupwork)
- Reflexive note: 20% (individual)

### Supervision

Office hours	No
Assistants	No
Forum	No

### Resources

#### Bibliography

- Ceschin, F., & Gaziulusoy, I. d. (2020). Design for sustainability : a multi-level framework from products to socio-technical systems. Abingdon, Oxon ; New York, NY: Routledge/Taylor & Francis Group.
- Manzini, E. (2015). Design, when everybody designs : an introduction to design for social innovation. Cambridge, Massachusetts: The MIT Press.
- Papanek, V. J. (1972). Design for the real world; human ecology and social change. New York,: Pantheon Books.
- Thompson, P. B., & Norris, P. E. (2021). Sustainability : what everyone needs to know. New York, NY: Oxford University Press.
- Verganti, R. (2016). Overcrowded : designing meaningful products in a world awash with ideas. Cambridge, Massachusetts: The MIT Press.
- Wizinsky, M. (2022). Design after capitalism : transforming design today for an equitable tomorrow. Cambridge, Massachusetts: The MIT Press.

### Ressources en bibliothèque

- Ceschin, F., & Gaziulusoy, I. d. (2020). Design for sustainability : a multi-level framework from products to socio-technical systems
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- Manzini, E. (2015). Design, when everybody designs : an introduction to design for social innovation
- Nova, N., L., L.-H., & M., C. (2016). Beyond Design Ethnography
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- Vezzoli, C., Ceschin, F., Diehl, J. C., Moalosi, R., M'Rithaa, M. K., Nakazibwe, V., & Osanjo, L. (2018). Designing Sustainable Energy for All : Sustainable Product-Service System Design Applied to Distributed Renewable Energy

**Websites**

- <https://designforsustainability.studio>

**Moodle Link**

- <https://go.epfl.ch/HUM-398>