

AR-402(t)

**Studio MA2 (Santamaria et Martinez)**

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Cursus	Sem.	Type
Architecture	MA2, MA4	Obl.
Mob. AR	E	Opt.

Language of teaching	English
Credits	13
Withdrawal Session	Unauthorized Summer
Semester Exam	Spring During the semester
Workload	390h
Weeks	14
<b>Hours</b>	<b>6 weekly</b>
Courses	2 weekly
Project	4 weekly

**Number of positions**

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

**Remark**

Inscription faite par la section

**Summary**

This course explores the potential of information and spatial analysis to develop a set of speculative proposals about future urban challenges.

**Content**

It is urgent to approach the planning of cities under a radical vision of the future, that faces the short and long-term transformations needed to preserve the habitability of our planet. The concentration of population and the consumption of energy, goods and food in urban areas means that cities are the places where the challenge of collective survival can be addressed - while configuring the resulting social order governing our lives.

However, contemporary socio-economic disruptions arising from the digital transformation have dissolved the hierarchies imposed by space, challenging us to understand how they invalidate previous urban regulations and their implicit social pacts. The effects of these profound transformations can only be understood by redrawing cities under novel perspectives (health, well-being, urban quality, prosperity, climate change and governance).

In this context, a new information ecosystem is available (open data from public bodies and big data generated by the use of information technologies) to generate complex diagnoses and inform the urban planning process.

The visiting studio will explore several scenarios of urban transformation based on a vocabulary of futures to rethink cities along with the disciplines and tools that ultimately shape them.

**Keywords**

Cartography, urban planning, urban data, spatial analysis, digital disruption.

**Learning Prerequisites****Recommended courses**

Cartography (Maçães)

**Important concepts to start the course**

Basic knowledge of geographic information systems and urban planning is recommended but not mandatory.

**Learning Outcomes**

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

- Identify a future challenge for a selected city/topic.
- Define available data sources to describe the identified challenge.
- Create a data model.
- Analyze and extract meaningful information from large amounts of urban data
- Interpret the information by means of cartographic expressions.
- Develop a multiple scale/format proposal.

### Transversal skills

- Demonstrate the capacity for critical thinking
- Access and evaluate appropriate sources of information.
- Demonstrate a capacity for creativity.

### Teaching methods

The unit will have both a theoretical and practical approach. A series of lectures providing both theoretical references, case studies and technical skills will be complemented with a practical assignment (research and proposal) assisted by desk critiques, weekly pin-ups and intermediate reviews.

### Expected student activities

The unit will focus in a Swiss city (in close proximity to Lausanne) as a case study. A field trip will be organised at the beginning of the semester and fieldwork will be required during the course.

### Assessment methods

Continuous assessment.

Desk reviews and pin-ups: 30% of grade.

Intermediate review: 30% of grade.

Review of final work: 40% of grade.

### Supervision

Office hours	No
Assistants	Yes
Forum	Yes

### Resources

#### Bibliography

The bibliography will be distributed at the beginning of the course.

#### Websites

- [http://epfl.300000.eu/epfl\\_vstudio\\_2021.pdf](http://epfl.300000.eu/epfl_vstudio_2021.pdf)