AR-809

Capitalizing on Uncertainty

Parascho Stefana

Cursus	Sem.	Type
Architecture and Sciences of the City		Opt.

Language of teaching	English
Credits	2
Session	
Exam	Project report
Workload	60h
Hours	**48**
Courses	10
Exercises	10
TP	28
Number of positions	

Frequency

Only this year

Remark

August 31-September 5, 2026 from 9.15 to 18.00. Room: GC B3 30. Registration via https://cap-uncertainty.epfl.ch/registration-2/

Summary

SUMMER SCHOOL - Capitalizing on Uncertainty is a 6-day Summer school exploring uncertainty as a productive resource in design and fabrication through lectures, hands-on experiments, and the collaborative design and construction of a full-scale structure in a human-robot fabrication setting.

Content

Uncertainty is a defining condition across disciplines - from psychology and robotics to architecture and structural engineering. While often treated as a risk to be minimized, this Summer school argues that uncertainty can instead be a productive force: one that fuels creativity, resilience, and innovation. Bringing together perpectives from **architecture, robotics, and work psychology,** the program explores how uncertainty influrences design thinking, fabrication processes, and collaborative work.
Over six days, teams will design and build a **1:1 timber pavilion** from **irregular material stock**, engaging directly with material variability, adaptive decision-making, and collaborative processes. By combining humanâ##robot interaction, interdisciplinary insights, and experimental making, the summer school offers a unique setting to engage with uncertainty across cognitive, material, and social domains.
Schedule:
DAY 1: CONCEPTUAL FRAMING
DAY 2: MODEL UNCERTAINTY
DAY 3: MATERIAL UNCERTAINTY
DAY 4: DESIGN (WITH) UNCERTAINTY
DAY 5: SOCIAL UNCERTAINTY
DAY 6: EVALUATION & REFLECTION

Details:
Fees: 250 CHF (PhD), 100 CHF (Master)
Accommodation: Provided for participants living outside Lausanne.
Registration: https://cap-uncertainty.epfl.ch/registration-2/

Keywords

timber, human-robot collaboration, projection interface, material variability, adaptive fabrication, digital fabrication

Resources

Websites

- https://cap-uncertainty.epfl.ch/contact/

Moodle Link

- https://go.epfl.ch/AR-693