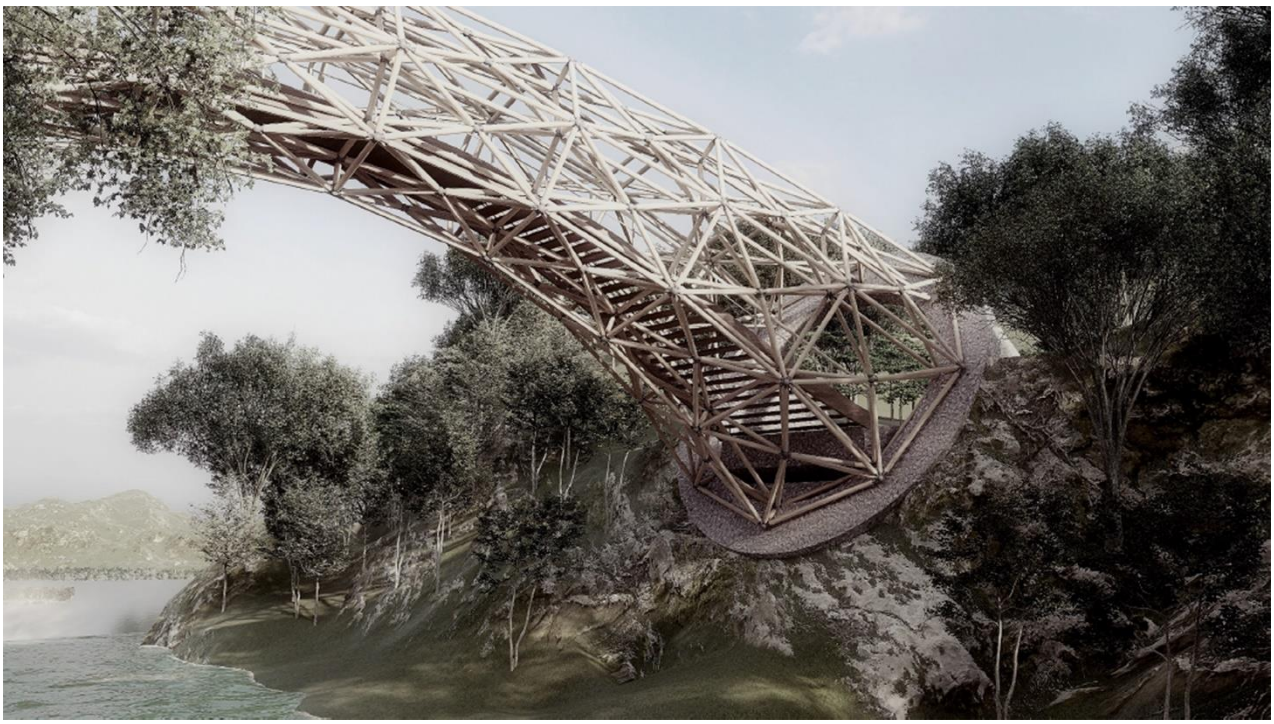
Structural Integrity: A Computational Design Investigation

International Summer School, September 2022, Ghent, Belgium



Student Project by Imlinochet Valling and Vaishali Lakar, 2021

*Construction is notoriously intense in its use of materials, and architecture holds a key responsibility in its rethinking of material and structural practice.**

The aims of this summer school are to explore the structural behaviour of complex structural systems and integrate this exploration into creative architectural design processes. Firstly, basic concepts of structural systems will be covered through explanations, exercises and experiments. Secondly, an architectural design task will be developed during the course. Students will need to bring a conceptual design and an abstract replicate of their concepts as a Grasshopper model to work further with. A design task will be provided prior to the summerschool. This conceptual design and its parametric model will be used to anlayze and develop the design further. Karamba plug-in will be used for the analysis. A final conceptual design task will be asked from the students as a follow-up activity. The learning goals are (1) gaining a basic insight in structural systems and (2) integrating the structural knowledge into creative architectural design tasks.

Application: Eligible for participation are all international students and recent graduates in the field of Architecture.

Dates: 4-12 September 2022

Organization Team: Öykü Acıcan, Laurens Luyten

Application Deadline: 30 June 2022

Interested candidates can register via the **application form.**

Requirements: Basic notion on the structural concepts, basic knowledge of Grasshopper, Laptop with Windows that provides the installation of all the software.

Fee : 50 Euros

Certification: All participants receive a certificate of participation (3 ECTS credits). Students of the Faculty of Architecture can validate participation in the follow-up track via the elective 'Participation in international projects' in the following semester (5 ECTS-credits).

Questions? oyku.acican@kuleuven.be

KU LEUVEN

This summer school is part of the PhD research of Öykü Acıcan. This research aims to develop an adapted experiential learning of structural systems to architecture students by using computational design.

**Thomsen, M. R., Nicholas, P., Tamke, M., & Svilans, T. (2020). A new material vision. In Data, Matter, Design: Strategies in Computational Design.*