



SUPER – Stuttgart University Program for Experiencing Research Project Information

Institute's Information

Name of Institute Integrative Technologies and Architectural Design Research M.Sc. Program

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Duration of Project/Number of Students

June/July

June/July/August x

Number of Students 2

Name of Project Integrative Technologies and Architectural Design Research Project

Beneficial Skills & Knowledge

Rhinoceros, Grasshopper, Python, ...

Description of Work

The focus of this studio is the design development and fabrication of a research project which will be constructed between the K1 and K2 university buildings in the summer.

The project offers the opportunity to participate in interdisciplinary and integrative research, to apply computational design, planning, simulation, and production methods to a real project and to develop experience on all phases of project development: from digital planning and simulation to robotic manufacturing and assembly on site (when paired with the summer semester studio).

Students will investigate computational design strategies and fabrication techniques for natural structures in order to identify potential future trajectories while positioning analyzed precedents within the larger disciplinary context. Based on these initial studies, new material-based fabrication concepts and resulting morphospaces will be explored.

The outcome of these investigations will be an overview of the research topic in the context of the discipline and a series of biomimetically informed fabrication concepts and proposals for their application as proto-architectural systems.



The most promising concept developed during this design studio will be the starting point for the development and realization of the ITECH Research Demonstrator in the summer term.

