IDE Institute of Buildings and Energy

RENEWABLE AESTHETICS

Module Energy Design

new master in-depth module

This module is part of an ongoing collaboration with BIG and part of a STUDENT COMPETITION which is financially supported by BIG with generous prizes. Students who participate in the module are automatically registered for the competition. Prizes are awarded at the end of the academic year based on evaluation by an independent jury

Why is it seemingly so difficult to integrate renewable energy systems successfully into architectural design? While it may seem that the largest challenges facing the integration of renewable energy generation into building designs are cost, local climate parameters, low efficiency, availability and dependability, the greatest challenge may lie in the, often unseen and little understood, dilemma of the necessary integration into architectural design. Every new building in the EU is to be designed as a nearly Zero Energy Building. However, in order to reach the goal of zero carbon emissions and halt climate change, we will have to go far beyond the current measures. Buildings will have to integrate substantial renewable energy production into their design. How can this be done without reducing the aesthetic quality of our built environment? Is it conceivable that this challenge could lead to new aesthetic qualities in architecture and urban design? The focus in this project will be primarily on solar energy use. Cooperation with industry partners will allow us to understand the technological challenges and potential better, while at the same time providing valuable insight and feedback regarding the aesthetic concerns and aims of the architectural design community to PV manufacturing companies. Other forms of renewable energy production such as wind energy and biomass will also be investigated.

registration Wednesday, 28. September 17:00

SE | UE energy design | energy design **LV 159.781** winter semester 2022/23 with Prof. Brian Cody Anyla Berisha Markus Bartaky