

Description graduation plan P2

Graduation plan: Building Technology

The graduation plan consists of at least the following data/segments:

Personal information	
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Studio	
Theme	Facade technology and real estate management
Teachers	Tillmann Klein, Alexandra den Heijer
Argumentation of choice of the studio	
Theme	
Teachers	
Title	
Title of the graduation project	Facade value Assessing and optimizing the value of a facade
Product	
Problem Statement	
<p>The increasing complexity of constructive systems, which can be specially seen in the case of facade design, results in a wider array of both potentials and drawbacks when selecting the right systems for a building. This becomes specially important when evaluating the possible success of a project from the point of view of the diverse parties involved (investors, owners, users). This research will develop the following questions:</p> <ol style="list-style-type: none"> 1. What is the impact of a façade system on the overall value of a building? 2. What are the main existing technical and financial models for façade design in new buildings and renovations? 3. How are these models reflected on current (and potential) architectural, technological and financial solutions for future facade systems? 	
Goal	
To develop a methodology for determining the performative value of a facade system, as a design tool for generating more sustainable facade solutions, better adapted to their uses.	

Process
Method description Apart from the performance oriented evaluation, other parameters will be taken into consideration when analyzing and comparing different facade systems. The purpose of this will be to evaluate not only the final product in terms of its operational performance, but also the financial, industrial and architectural backgrounds that shape each one of these scenarios.
Literature and general practical preference The research will partially be a continuation of the work done by one of my tutors, Dr. ir. Alexandra den Heijer, in her research paper "Assessing facade value - How clients make business cases in changing real estate markets" (2013)
Reflection
Relevance From a wider perspective, (ecologically) sustainable development must go hand in hand with the needs and trends of financial and real estate markets. Designing facades to be better suited to the specific needs and demands of clients and final users is the best strategy towards implementing systems that will work efficiently, for a longer time, without the need for additional energetic and financial investments, and with an optimal initial energy input.
Time planning The work plan between main presentations will be as follows: Start to P1 - Definition of conceptual frame and evaluation methodology. Selection of research parameters for case studies. P1 to P2 - Analysis of case studies according to established parameters. Selection of most relevant cases for further development in the final (production) stage. Definition of general aspects to be considered for final typology design. P2 to P4 - Elaboration on final design typologies according to data gathered in the initial stages. Design, documentation and presentation of typologies according to the 4 performance values (strategic, financial, energetic and functional).