Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

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

Personal information	
Name	Erik Bakker
Student number	4643038
Telephone number	
Private e-mail address	

Studio	
Name / Theme	Architectural engineering – Robotic building
Teachers / tutors	H. Bier & A. Hidding
Argumentation of choice of the studio	As the industry transitions from an industry of mass standardization towards an industry of mass customization, I've asked myself how this transition, in terms of design, can happen in architecture. Bridging the gab between the conventional way of building/designing and highly customized architecture.

Graduation project	
Title of the graduation project	Pixel City
Goal	
Location:	Amsterdam – Sloterdijk Zuid
The posed problem,	The housing prices in Amsterdam are skyrocketing, creating a lack in affordable housing. Families are therefore moving out of the city creating a lack in social diversity. Within the context of Amsterdam Haven-Stad there is an opportunity to design affordable housing that offers a higher spatial quality of dwelling than the current market is able to provide.
research questions and	The research question is therefore; how can the quality of dwelling be improved for families in Amsterdam?

design assignment in which these result.	A residential building that provides place for working and dwelling.

The design assignment is about transforming a plot in Amsterdam Sloterdijk Zuid. This plot is currently part of an industrial area. This will be transformed towards a residential building that provides space for working and living with an emphasis on dwellings for families. The goal of this graduation project is to create affordable family homes that are relatively small yet feel spacious. With a computational strategy to generate more possible design solutions than one would be able to do by hand.

Process

Method description

- Analyses
- Volume study by computation model
- Literature studies
- Drawings

Literature and general practical preference

- Pallasmaa, Juhani. (2005). The Eyes of the Skin: Architecture and the Senses. Publisher: Wiley-Academy, Chichester
- Bier, Henriette. (2018). Robotic Building. Publisher: Springer
- Madanipour, Ali. (2003) Public and private spaces of the city. Publisher: Routledge

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

   The relation between my graduation project and the studio topic is a computational approach towards creating architecture. Generating architectural possibilities based on performances, where ultimately it becomes a process of selecting a solution that suits best for the design assignment. It relates to the master track Architecture by creating a building that is based on performances (from an urban level all the way to furniture) that also needs to perform on a social level. Creating dwellings that provide a more enriched spatial quality and experience to live in. Integrating technical, social and spatial challenges.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

   The relevance of my graduation work in relation to the larger social, professional and scientific framework lies in the computational approach towards creating architecture. Where the end product is not solely the result of one's imagination, but of the rules and parameters that have been set up. Where the architecture created results in a more dynamic and enriched way of living.