

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	Dost Şahingöz
Student number	4724011

Studio		
Name / Theme	Architectural Engineering	
Main mentor	Thomas Offermans	Design tutor
Second mentor	Pierre Jennen	Building Technology tutor
Third mentor	Tess Blom	Research tutor
Argumentation of choice of the studio	I chose this studio because of the well-rounded approach and strong focus on technical innovation within architecture. The strong correlation between architectural and technological development have always inspired me to think in multidisciplinary ways, which is essential to tackle the complex problems that we face nowadays.	

Graduation project	
Title of the graduation project	Urban Agriculture as a Catalyst for Healthier Post-war Neighbourhoods
Goal	
Location:	Boerhaave, Haarlem
The posed problem,	Nowadays, the challenges related to food resilience are particularly pronounced in lower-income neighbourhoods, which are often located in the post-war neighbourhoods in Netherlands. The pressing need for transformation in these neighbourhoods is underscored by the low density of built structures, poor energy efficiency and the overall health and well-being of their inhabitants (KAW, 2022). On the neighbourhood scale, problems arise from abrupt shifts between public and private domains, underutilized green spaces, limited diversity of flora and fauna, and a lack of social safety. As demonstrated in research from Van Velze et al. (2020), the quality of the living environment has a significant impact on the physical and mental well-being of the residents. Besides, these neighbourhoods show the highest percentages of residents adopting unhealthy lifestyles, which mostly include physical inactivity, unhealthy diets and smoking

	(Van Velze et al., 2020). As prices of food have increased with more than 10% in one year (CBS, 2023), the consumption behaviour of these people has been effected, forcing them to go for cheaper and unhealthier alternatives (EenVandaag, 2022).
research questions and	<p>Thematic research question: "How can the implementation of urban agriculture in post-'65 neighbourhoods foster self-sufficiency, improve physical and mental health, and promote community engagement through locally owned food production?"</p> <p>Sub questions:</p> <ul style="list-style-type: none"> - How can urban agriculture stimulate and improve mental and physical health? - How can urban agriculture stimulate social interaction? - How can urban agriculture foster self-sufficiency? - How can urban agriculture effectively be integrated in post-war neighbourhoods?
design assignment in which these result.	How can we design a new mixed-use building that integrates the existing public functions of Boerhaave with urban agriculture in order to create a healthier, social and self-sufficient neighbourhood?
<p>The projects aims to express a holistic example of community living, education and culture through the use of urban agriculture. It encompasses a circular timber building that fulfils the needs of the current residents and the future users. The building becomes the centre of the neighbourhood, a place where people can come together, learn about agricultural practices, engage in harvesting, explore cultures and become an empowered community.</p>	
Process	
Method description	
<p>Research:</p> <ul style="list-style-type: none"> - Literature analysis in order to identify the factors that influence health, social interaction and self-sufficiency. - Case study analysis: analysing 8 case studies (two per category) and identifying key design measurements that have contributed to the improvement of one of the three research topics (health, social interaction and self-sufficiency). - Creating a rating system in order to assess the case studies. - Context analysis which will be done through a SWOT analysis of the region. Based on these aspects, the best suitable design measures that derive from the case studies can be proposed as a feasible option. <p>Design:</p> <ul style="list-style-type: none"> - Urban analysis and design, starting from the scale of the neighbourhood - Site visits (Boerhaave and reference projects t.b.d) 	

- 3D modelling, sketching, material collages
- Meetings with city architect
- Reference studies

Literature and general practical preference

The used literature can be found in the reference section. It includes literature from national institutes (RIVM, CBS and Ministry of Education, Culture and Science) as well as journal articles from renowned urban agriculture researchers. Literature on existing case studies are also included.

General practical preference:

Timber construction, urban agriculture, communal living, mixed-use, circular building, design for disassembly.

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)?

Throughout my entire master I have had a strong focus on community style living and incorporating agricultural practises in my designs. My passion for food and nature have driven me to explore the various possibilities of a less individualistic society into one where people become more connected to our primal needs, habits and each other. The proposed context in Boerhaave by the aE graduation studio aligned well with my interests and the target groups I wanted to focus on.

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

I aim to provide a meaningful alternative to prevalent liberal governing states. The inclusion of urban agriculture as a focal point is pivotal, serving as a conduit to reconnect individuals with life's fundamental elements. Moreover, it contributes significantly to bolstering food security, nurturing robust social relations, and promoting overall health. On a societal level, my work strives to cultivate a community founded on cooperation and harmony. From a professional standpoint, it offers a sustainable model for urban development, emphasizing inclusivity. Scientifically, my project provides valuable insights at the crossroads of governance, culture, and urban agriculture, propelling innovative solutions to address pressing societal challenges.

