

# 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](mailto: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	Joaquim Boendermaker	
Student number	4611497	
Studio		
Name / Theme	AR3AD100 Advanced Housing Design – Ecologies of Inclusion	
Main mentor	Ir. Olv Klijn	Architecture and the Built Environment, Public Building and Housing Design
Second mentor	Ir. Ruurd Kuijlenburg	Architectural Engineering + Technology
Argumentation of choice of the studio	<p>The Dutch housing crisis for me is without a doubt the largest challenge in the field of architecture in the Netherlands at the moment. Housing is a fundamental right, but the market is becoming increasingly unreachable and skewed. Unfortunately, those that suffer from this the most are often also those with weaker (financial) positions in society: people who for example are unemployed, did not follow a high level of education or live alone.</p> <p>I was very interested into learning more about dwelling and how contemporary challenges like the housing crisis (but also climate change and societal issues for example) influences modern approaches to dwelling design.</p> <p>I already enrolled in and completed the Fundamentals of Housing Design MSc1 studio in the 2023-24 academic year. With my aforementioned interest however, also taking the Advanced Housing Design Graduation Studio wasn't a hard choice for me either. The studio addresses modern day challenges related to dwelling design and aims to address them holistically. For me, it immediately seemed like a very interesting graduation project that tackles a present problem in a familiar context, but also allows for a lot of freedom and flexibility into eventually choosing a topic or theme to focus on within the graduation.</p>	
Graduation project		
Title of the graduation project	Reverting social atomization   Learning from cohousing to combat urban loneliness	
Goal		
Location:	Tanthof-West, Delft, the Netherlands	
The posed problem,	With the state of the Dutch housing market, the pressure on quickly constructing new homes is high. However, in the Netherlands, another problem is arising, which is the increase of loneliness throughout the population. Loneliness is not just an individual problem, but a societal one: it may affect anyone, can cause major physical and mental health risks, and in the long run may put extra pressure on the Dutch healthcare system. There is evidence that links loneliness to the built	

	<p>environment architecture – after all, since 90% of time is spent indoors, the way we live can strongly dictate how much we interact with other people. However, not much research has been done that confirms the links between specific architectural elements/interventions and a reduction in loneliness.</p> <p>Within the constraints of this thesis, it will not be possible to simply prove the possible correlation between architecture and reducing loneliness. For this, widescale statistically relevant research would have to be executed. However, the intention of the research in this thesis is to understand, through case study analysis a.o., how innovative cohousing projects seek to lower thresholds for social interaction, and through this, may reduce loneliness. These may then be used as a collection of good practices for the eventual design project.</p>
research questions and	<p>Main research question:</p> <p>In what ways can the architecture of cohousing contribute to reducing loneliness and its negative health effects?</p> <p>Subquestions (per subtheme):</p> <p>Loneliness</p> <p>What is the urgency? How is loneliness defined? What are the negative consequences? Who is affected? How is loneliness linked to the built environment?</p> <p>Cohousing</p> <p>What is the urgency? How is cohousing defined? What types of cohousing are there? How can they be categorized? Which examples are relevant?</p> <p>Design case study (Midden - Delfland)</p> <p>What is the assignment? For whom is it relevant?</p>
design assignment in which these result.	<p>The Advanced Housing Design Studio for 2024/25 departs from the Redesigning Deltas Design study, in which the offices of ZUS, Flux and Sweco have created a vision for area of Midden-Delfland. After several months of group analysis and design, a masterplan has been created that elaborates on (but also alters) this vision. This masterplan has been created for the area between the neighborhoods of Tanthof-West and Tanthof-Oost in Delft, right on the edge of Midden-Delfland. The individual design will continue and zoom in on this masterplan, positioning itself right on the edge of the neighborhood of Tanthof-West. Here, within the contextual restrictions of current infrastructure, existing urban developments, the water system and a barn with historical value, a new block scaled development will be designed that seeks to incorporate the research and form a new urban configuration that tries to reduce loneliness through urban and architectural design decisions on multiple scale levels.</p>

## Process

### Method description

Theoretical literary research will be executed to get an understanding of loneliness and cohousing. A case study analysis will be executed to understand the working of relevant cohousing projects. This analysis includes site visits and on-site interviews with residents of the projects. Lastly, as a means of establishing target groups for the eventual design project, speculative narratives will be constructed that portray the demands and wishes of possible residents of the design project.

### Literature and general practical references

Literature on loneliness cover among others:

- The theory on social and emotional loneliness by Weiss
- The cognitive discrepancy theory by Archibald
- The theory on loneliness by De Jong Gierveld

Literature on cohousing is mainly based on Operatie Wooncoöperatie by Lengkeek & Kuenzli. Additionally, information from case studies is taken – if possible – from online interviews with residents and other firsthand sources involved.

### 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)?

Within the Advanced Housing Design Graduation studio, the theme of 'ecologies of inclusion' has a central position. These ecologies can be considered to have an environmental aspect or a social aspect (or perhaps even both). I have decided to focus primarily on a social aspect – loneliness – as it struck me as an interesting topic, and is also quite personal for me. After some research, it became clear that loneliness is a growing issue on a national and even global scale. It is also something that we can connect to our discipline, as architecture – and the built environment in general - quite profoundly influence the type and amount of social interaction we have. Furthermore, I believe that as designers we are obligated to try to understand social issues like loneliness and how, through design, we may help to mitigate these issues (whilst also achieving other design goals). This requires a holistic approach, and may therefore also be valuable in regards to the other disciplines/tracks in this master programme.

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

With this work I hope to contribute to giving an understanding of what loneliness entails and how we may relate it to the built environment. This work will also show that, although there may be links to be made between the two, architecture alone will not solve loneliness. Therefore, simultaneously this may be a call for more research and understanding of the subject in the wider framework.