

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	Pim Voermans
Student number	4304454

Studio		
Name / Theme	AR3AH115 Graduation Studio Revitalising Heritage (2021/22 Q1)	
Main mentor	Nicholas Clarke	Architecture
Second mentor	Wido Quist	Technical
Argumentation of choice of the studio	The technical and social aspects of a contemporary renovation project are aligned with my personal fascinations. Learning to work with (potential) heritage values would be a valuable addition to my skillset.	

Graduation project	
Title of the graduation project	The Modern Minimum
Goal	
Location:	Amsterdam Bijlmerplein, Cluster 2 & 3
The posed problem,	The housing crisis and climate crisis each call for drastic measures. A historic example of an intervention in the housing market is the minimum dwelling. The definition of a minimum dwelling has to be adapted to its modern context to also fit the ecological needs of today.
research questions and	<p>What is the potential of minimum dwellings in an urban renovation project?</p> <p>Subquestions:</p> <ul style="list-style-type: none"> - Which minimum dwellings concepts can be implemented and adapted? - How can they be implemented on case study renovation project Bijlmerplein?

	- Is the design, resulting from implementation of contemporary minimum dwellings, satisfactory?
design assignment in which these result.	Implementing and evaluating historic and contemporary minimum dwelling concepts to in contemporary urban renovation project Bijlmerplein Clusters 2&3.
Process	
Method description	
<p>From previous research 3 minimum dwelling concepts are chosen, two historic, one contemporary. All of these are adapted to be ecologically just in accordance with Kate Raworth's model of Doughnut Economics.</p> <p>The adapted definitions of minimum dwellings and a historical and technical (group) analysis of the site lead to design requirements for a renovation plan and design for Bijlmerplein Clusters 2&3.</p> <p>The adapted minimum dwellings are implemented in a cohesive renovation plan and design for Bijlmerplein Clusters 2&3.</p> <p>The implementation is then evaluated using a framework adapted from a model described by Kamari et al (2017).</p>	

Literature and general practical preference

Stronk, R., Fosso, M., Meeuwissen, J., & Stroink, R. (1981). *Ir. JH van den Broek: Projecten uit de periode 1928-1948*. Delftse Universitaire Pers.

Teige, K. (2002). *The minimum dwelling*. MIT press.

Kamari, A., Corrao, R., & Kirkegaard, P. H. (2017). Sustainability focused decision-making in building renovation. *International Journal of Sustainable Built Environment*, 6(2), 330-350.

Raworth, K. (2018). *Doughnut Economics* (1ste ed.). Cornerstone

Brysch, Sara. (2019). Reinterpreting Existenzminimum in Contemporary Affordable Housing Solutions. *Urban Planning*. 4. x-x. 10.17645/up.v4i3.2121.

Vanstiphout, W. (2005). *Maak een stad: Rotterdam en de architectuur van JH van den Broek*. 010 Publishers.

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 foremost relation between my graduation project and the studio is the case study, which is a 70/80's architectural project in the Netherlands. The studio focuses on what to do with potential heritage values in projects that are not seen as fashionable now, but might be in the future. The design requirements that will be formulated will also incorporate these potential heritage values. The master architecture track and programme define the benchmark that my graduation project aims to clear in its final state.

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

In the social context, the graduation project aims to implement and adapt a historic design intervention to provide a solution to the current housing crisis in the Netherlands and global economic crisis. A successful result would indicate potential for the implementation of minimum dwellings to reduce current social and ecological inequalities. Additionally, in the process of completing the graduation project the ecologically safe and socially just boundaries of Kate Raworth's doughnut in regards to housing will be defined.