

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	Maria Louisa Helena Willemsen (Marloes)	
Student number	4494725	
Studio		
Name / Theme	Urban Ecology & Ecocities	
Main mentor	Nico Tillie	Landscape Architecture
Second mentor	Rients Dijkstra	Urban Design
Argumentation of choice of the studio	<p>Urban Ecology & Ecocities</p> <p>During my Bachelors, I always felt like an outsider. I was putting in all the hours of work, but it never felt like I knew what I was doing and although the grades were fine, it still felt empty. The same feeling I had when I entered my masters of Urbanism. It was only when I started working on the cross domain of Urbanism and Landscape Architecture that I felt at home. Here I have found my niche. My deep interest in climate restoration, ecology, balance between pragmatical work and philosophical thinking, drawing and societal relevance were all bundled in the studio of Urban Ecology and Ecocities. I believe this studio is open for an experimental approach towards design. Since we are not ecologists, environmental scientist, botanists, etc. we have to reposition ourselves as designers within the scientific context. Above that, most citizens are ignorant towards the environmental crisis that is looming. I find it an endlessly interesting challenge to design for a sustainable future for human- and nonhuman life.</p>	

Graduation project	
Title of the graduation project	Gardens of Responsibility
Goal	
Location:	Tanthof, Delft
The posed problem,	<p>The Netherlands have fought a long battle with nature. As a country below sea level, we conquered our nature, controlled it and made profit out of it. Due to urbanisation, parts of the landscape were replaced by a human dominated built environment, which continues to limit the availability of nature. Next to that we developed a society where most people work and live indoors, enhancing the feeling of us (human, internal) and that (nature, external) as separate entities, called a Human-Nature dualism. In our day-to-day lives, it becomes almost invisible why we need nature. The Human-Nature dualism results in people lacking a feeling of responsibility for the natural environment.</p> <p>As urbanisation is drastically increasing in the Netherlands, there is a serious pressure on the quantity and the quality of green. The impoverished nature in cities becomes the norm for our future generation, and the emotional connection, the sense of commitment to protect nature, is decreasing. It is therefore important to minimize the negative effects of urbanisation and maximize the experience of nature to enhance biodiversity conservation.</p> <p>The metropolitan region of Rotterdam-The Hague is the most urbanised area in the Netherlands. Between Delft and Rotterdam lies Midden-Delfland, enclosed by greenhouses and urban area, this green buffer has the potential to become a Metropolitan Garden. However, the reachability for slow traffic is poor, the industrial character of the Schie-route is unattractive, there is a lack of program for the metropolitan citizens and the transition between city and landscape is quite harsh.</p> <p>Delft is a middle-sized city in between Rotterdam and The Hague. It contains two large green areas owned by Staatsbosbeheer: Delftse Hout and Abtswoudse Bos. Whereas Delftse Hout is full of swimming, walking and picnicking people, the Abtswoudse Bos is not that popular. As an transition area between city and Midden-Delfland, there is a lack of attractive infrastructure for slow traffic to the area and not enough functions to attract visitors.</p>

	<p>Tanthof is a neighbourhood with a woonerf typology from the 70's, located on the edge of the Abtswoudse bos and surrounded by the heavy infrastructure of highway, the Kruithuisweg and the train. The neighbourhood has a strong green infrastructure, although the green has a private, backside character. I challenge the effectiveness of the design elements of the woonerf for the case of Tanthof. The absence of attractive public space, the enclosed character of the building type and the excess of paved area leads to a lack of interaction between residents and between residents and nature.</p>
research questions and subquestions	<p>How can urban design of the woonerf type in Tanthof contribute to restore the natural landscape system of Midden-Delfland, by facilitating meaningful gardens of responsibility?</p> <p>What happened to the relation between human and nature? What are the characteristics of the woonerf? What is the effect of Urban Green Space management on biodiversity? What is required to design spaces that improve the connection between human and nature?</p> <p>How could the landscape of Delft and Midden-Delfland reconnect with the original landscape? How and where can the original landscape of Midden-Delfland be restored? How to make the transition between the Natural system of Midden-Delfland and Tanthof? How could the urban design of the woonerf facilitate connections for slow traffic between Delft and Midden-Delfland?</p> <p>How to facilitate change to improve the biodiversity in Tanthof as an urban designer? How could nature-based design provoke a sense of responsibility for ecosystem protection in citizens? What elements of the woonerf could be used to reconnect the neighbourhood to the natural system of Midden-Delfland?</p>
design assignment in which these result.	<p>To make an integrated design through the scale levels of Midden-Delfland, Abtswoudse Bos, Tanthof and the street. The citizens of Delft will reconnect with the natural system of Midden-Delfland through ecosystem restoration programs, routes for slow traffic that improve the reachability, and by adding functions that will make people stay longer in the natural environment. The overall focus of the design is to increase the availability of green and also the human interaction with green, with the goal of creating a sense of commitment to protect nature.</p>
Process	
Method description	

My graduation starts with the group effort of mapping the Staatsbosbeheer areas near 16 Dutch cities. Here we conclude what opportunities are present in making stronger physical connections between city and the nature areas of Staatsbosbeheer.

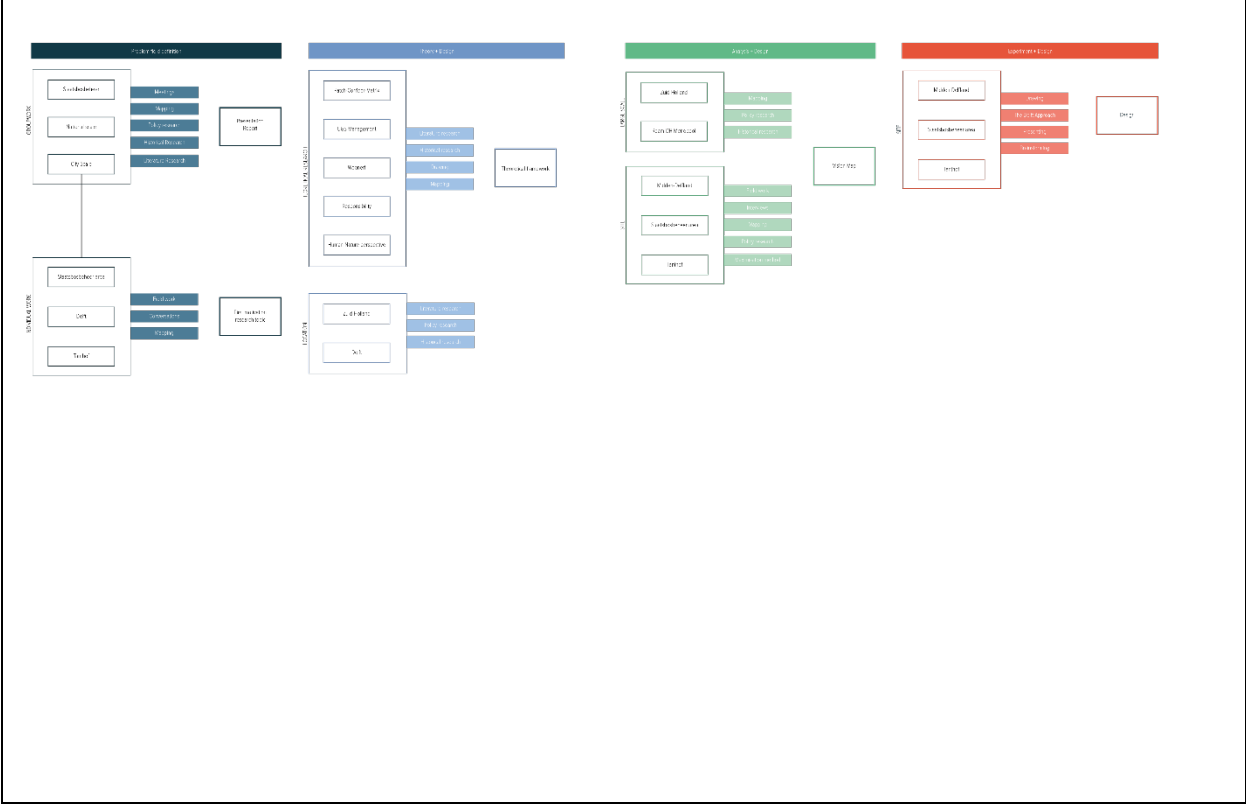
I categorize my design approach into 3 phases: Theory+Design, Analysis+Design, and Experiment+Design, whereas design is always seen as a way to translate and present my findings.

I divide my *literature research* into 3 different categories: Scientific literature, Philosophical literature and Historical Literature. I use literature research for my problem field definition and later as a theoretical framework for my design.

My own graduation topic builds upon the groupwork mapping, as I zoom in on Delft and Midden-Delfland, where I use *mapping* as a means understand the spatial conditions through different scale levels. I use the maximization method, from my graduation intensive to as a means to analyze the possibilities in the redesign of Tanthof. I will use information from the theory, mapping and maximization method and translate these into a vision map.

In the experiment+design phase I use the Delft approach, a combination of brainstorming, designing, analyzing, concluding and presenting as a method to explore multiple design possibilities through scales.

I use several methods of feedback: interviews, brainstorm sessions, meetings and presentations. Where brainstorm sessions and meetings could diverge my design ideas, presenting and interviewing will help convergent my thoughts and narrow down the design direction. These methods are most useful if I reach out to a diverse group of people (peers, tutors, residents of Delft, people from Staatsbosbeheer), to gain different forms of feedback (formal/informal).



Literature and general practical preference

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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)?

My graduation topic aims to combine the knowledge of Landscape Architecture and Ecology with Urbanism. The ultimate goal is to blur the lines between the human habitat and the earth's natural conditions; that the human habitat does not erase nor dominate the habitat of non-human life. I will use the knowledge from the Landscape Architecture department to (partly) restore the natural system of Midden-Delfland. As an urbanist I can combine my knowledge about the built environment to study the elements of the woonerf and use these elements to embed the neighbourhood better in the natural system of Midden-Delfland. I believe this is what the studio of Urban Ecology & Ecocities stands for.

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

I aim to define how the industrialization led to a misleading perception of nature in the Dutch society. I will position myself as an urbanist within this discussion and use inspiration from the Buddhist ideology to explain why we have to change this perspective. In my design I hope to explore how spatial design can contribute to changing this perception of nature. By first analyzing spatial conditions and linking that to theory from environmental philosophy, in my design I'd like to use another theory from the environmental philosophy and translate this into a design.

The Woonerf is a commonly used neighbourhood type in the Netherlands. As these neighbourhoods are often located in the city edge, the transition from city to nature becomes an interesting element to design with. A reinterpretation of the woonerf will hopefully inspire other urban designers to use the elements of the woonerf in a way that is beneficial for residents and biodiversity.

