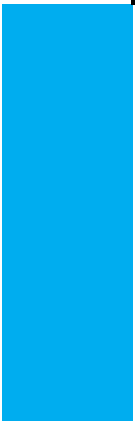


Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

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

Personal information	
Name	Daphne van Dooren
Student number	1502549 (wordt gebruikt voor koppeling met student file)
Telephone number	06-37479379
E-mail address	daphnevandooren@gmail.com
Studio	
Name / Theme	Urban Metabolism
Teachers	Alex Wandl, Frank van der Hoeven (alleen die waarmee student werkt)
Argumentation of choice of the studio	The project addresses the flow of heat, from both a technical and social perspective.
Graduation project	
Title of the graduation project	Warming up for the cooling down: Towards an integrated urban design with adaptation strategies to the Urban Heat Island effect
Goal	
Location:	Bospolder-Tussendijken and Cool in Rotterdam, the Netherlands.
The posed problem, research questions and	There is a lack of knowledge on how adaptation strategies to the UHI effect can be implemented in urban design, without changing the other focuses for the design. Main question: How can adaptation strategies to the Urban Heat Island effect be integrated in urban design, and in an exemplary neighbourhood in Rotterdam? Sub questions: - What is the Urban Heat Island effect, and what are the causes and consequences of it in general and for Rotterdam? - What are the possible adaptation strategies to the Urban Heat Island effect, and how effective are they? - How can adaptation strategies be integrated in urban design in general, and in the case of Rotterdam?
design assignment in which these result.	Integration of adaptation strategies to the Urban Heat Island effect into urban design in general, and two neighbourhoods in Rotterdam.
This should be formulated in such a way that the graduation project can answer	

these questions.

The definition of the problem has to be significant to a clearly defined area of research and design.

Process

Method description

Literature review by research questions
Case comparison: quantitative/qualitative impact
Pattern language from effective adaptation measures
Vulnerability/spatial/social analysis for integrated design
Design of urban elements from patterns

Literature and general practical preference

Literature: Ahmed Memon, Van Hove, Klok, Oke, Taha
Patterns: Alexander
Graduation projects: Lugten, Van Lohuizen
Data: project Hotterdam
Cases: Scheldekaaien/Theater square (Antwerp), Olympic Park/Jubilee Gardens (London), Orestad/Nordhavn (Copenhagen)

Reflection

Relevance

Studies demonstrate that heat causes problems, and that the Urban Heat Island effect exists in the Netherlands. Urban designers are able to enhance the liveability of the urban environment during hot periods, and reduce risks related to climate change.

Time planning

Before P1: literature review, preliminary thesis plan
> P2: literature review, case comparison, select location, thesis plan
> P3: pattern language, location analysis, design
> P4: design, reflect on patterns, thesis
> P5: thesis, presentation