

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	Gerwin van den Boogaart
Student number	5061806

Studio		
Name / Theme	Complex projects, migration of ideas	
Main mentor	Manuela Triggianese	Architecture
Second mentor	Eline Blom	Architecture
Argumentation of choice of the studio	I was interested in making a design in a bigger context. The complex projects studio offers this opportunity. First with a group a vision will be created for a site for the future and after that each student of the group will design its own intervention which contributes to the bigger vision. This concept was very appealing to me because it kind of imitates the reality of working together on a bigger plan.	

Graduation project	
Title of the graduation project	Resilient communities, By using both hard and social infrastructure, a resilient community will be established which will be prepared for future climate changes.
Goal	
Location:	On an open field North of Zuidplein shopping center in Rotterdam.
The posed problem,	In the upcoming years, the city of Rotterdam has to deal with different kinds of climate change like extreme weather, the urban heat island effect, draught and flooding. The city has to be adapted and prepared to deal with these changes. Only hard infrastructure like dikes and flood parks are not enough, the habits of the people have to be changed in order to prepare them for these changes. The new building will attempt to achieve this.

research questions and	How can both social- and hard infrastructure contribute to the creation of a resilient climate proof community?
design assignment in which these result.	<p>After doing research it appeared that to create a social infrastructure, interaction between people has to be stimulated. To make the as accessible as possible a non – profit organization would be the perfect fit. A combination between a new headquarters for the Red Cross combined with meeting areas for the two target groups, the elderly and the children, would be the perfect fit for the building. Together this is called the Red Cross Social Center. The design guidelines for this building are to in the first place connect the people from the different adjacent neighbourhoods, now these are disconnected by wide busy roads. Second, to connect these people a very accessible building is needed, people have to enter without hesitating. Third, the building has to make the Red Cross visible again in the Netherlands. Most of the Dutch people think that the Red Cross only helps people abroad, the aim is to show that they also have a great impact in the Netherlands. And lastly, the building has to mitigate the effects of climate change that are impacting the site.</p>
Process	
Method description	
<p>First as a group, the whole site is analyzed in different layers: Historical, mobility, future vision, environment, buildings, economy, demographics and public space. With this knowledge and the future vision of the city for the site a group vision is created for the site. For the individual research, first a research is done to determine the way of how to deal with climate change. This is done by a literature research. This research resulted in two aspects of dealing with climate change. First the social infrastructure, which was researched through the books of the American sociologist Eric Klinenberg. The second part, the hard infrastructure was more oriented on the site. By using different sources of the government like the klimaateffectatlas the different aspects of climate change that have impact on the site are determined. After this a literature study will be done about accessible buildings and how to design</p>	

one, and on the different ways of dealing with the climate change aspects that impact the site. Lastly these researches will be combined into a building design.

Literature and general practical preference

Listed below are the most important sources which form the basis of this research:

- google. (2019, February 5). Palaces for the People | Eric Klinenberg | Talks at Google [Video file]. Retrieved from https://www.youtube.com/watch?v=HJIYhSA84Sc&ab_channel=TalksatGoogle
- Klinenberg, E. (2015). Heat Wave: A Social Autopsy of Disaster in Chicago (Second ed.). Chicago, USA: University of Chicago Press.
- Klinenberg, E. (2020). Palaces for the People: How To Build a More Equal and United Society. New York, New York: Vintage.
- Rotterdam.Climate.Initiative. (2013, October). Rotterdamse Adaptatiestrategie. Gemeente Rotterdam. Retrieved from <https://www.010duurzamestad.nl/wat-wij-doen/lopende-projecten/rotterdamse-adaptatiestra/adaptatiestrategie.pdf>
- Stichting Climate Adaptation Services. (n.d.). Viewer - Klimaateffectatlas. Retrieved from <https://www.klimaateffectatlas.nl/nl/>

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 overall topic of the studio is the migration of ideas, which means that an idea exists in a particular space or time and then migrates to another space or time. The migration of ideas of this project is the migration of social climate change adaptation, this idea started in the United states in 1996 and then travelled through the world. The architectural part is the exercise to try and translate this idea into an design, a design of more then 10.000 sqaure meters. This huge amount of surface and the many different functions that it houses makes it into a complex project.

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

The idea of creating a social infrastructure to change the habits of people and prepare them for future climate change is only applied in a theoretical way, never into a design. This project aims to combine both this idea of social infrastructure and the original hard infrastructure into a building in a neighbourhood with the lowest living quality in the Netherlands to deal with the climate change which is happening worldwide.