

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 | |
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| Studio | | |
|---------------------------------------|--|-------------------------|
| Name / Theme | Heritage & Architecture – Adapting 20C Heritage | |
| Main mentor | Nicholas Clarke | Heritage and Design |
| Second mentor | Frank Koopman | Heritage and Technology |
| Argumentation of choice of the studio | <p>The repurposing of obsolete buildings has become a familiar concept in architecture. In contemporary times we accepted the need for restoring, redefining & repurposing used buildings. Our resources are finite and our energy consumptions are too wasteful. This is one of the reasons I chose this studio, becoming more aware in a rapidly changing world.</p> <p>However, re-design is also a form of archeology, meaning the case study has inherent historical values, apart from its aesthetical appearance. It becomes a discovery of its past, while focusing on the future. The studio has also a personal reason of choice, since I'm born and raised in Rotterdam. I always wondered in which way designers could appreciate and redevelop the wide variety of empty buildings in Rotterdam. I believe this studio offers a rare combination of complexity & pleasure, where I'll be challenged to design and value an interesting building regarding its past, present and future.</p> | |

| Graduation project | |
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| Title of the graduation project | The Maassilo: In the Belly of the Beast |
| Goal | |
| Location: | Maashaven Zuidzijde 1-2, 3081 AE Rotterdam |
| The posed problem, | Rotterdam underwent a large evolution from the end of the nineteenth century when this city became one of the leading continental port cities of the world (Van de Laar & Van der Schoor, 2018, p.22). The city which originally was founded at the estuary of |

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| | <p>the Rotte, located on the northern bank of the Meuse, later sprawled across the river. After the construction of the New Waterway in 1863-1869, the city began to urbanize the land south to the Meuse. Along the river new man-made docks punctured the meadows on the river banks (Van Meijel, Hinterthur et al. 2008, p.31). These docks provided suitable areas for harbor activities such as the loading of goods and people. Since the expansion of the Maasvlakte I in 1973 and the Maasvlakte II in 2013 the harbor basins inside the city center have become obsolete to their former use. The industrial activities that used to take place on the quays have been relocated because of insufficient space due to the increased demand for harbor activities. However, the harbor basins and the quays and the industrial building that come along with them still reside on these former harbor areas now located on a centralized position within the city. Furthermore the building's size and layout (for example all the empty silo cells) are designed according to its former industrial use. This collides with the contemporary and future visions of the municipality. The building is destined to become a cultural hub (clustering of cultural functions) purposed for the inhabitants and tourists of Rotterdam. This results in the question; <i>How can you re-design the Maassilo into a public space that incorporates both the human scale as the urban scale?</i></p> |
| research questions and | <p>Research Question: <i>How can you re-design the Maassilo into a public space that incorporates both the human scale as the urban scale?</i></p> |
| design assignment in which these result. | <p>The goal of this graduation studio is to re-design the Maassilo into a public space or as defined by the municipality: a cultural hub that facilitates cultural functions on a regional and national scale. The Maassilo is a large historical remnant of the glory days of the Rotterdam harbour area and is appreciated by its inhabitants. It is the designer's responsibility to value this appreciation and historical importance. How do you address the human scale in a building designed for industry? And how do you position the building on an urban scale?</p> <p>Architecture is one of the most complex fields in science since it can deal with every aspect of human life. It has societal tendencies, political and psychological ones and countless more. Architecture is omnipresent. It's everywhere. In my ambition towards architecture I strive towards presenting a definition of my architectural fundamentals. In my perception should architecture be first and foremost a tool to facilitate people. The architectural design has a user, who is presented the opportunity of using the design. This design of the architect should engage the people (users) and the</p> |

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| | <p>design in a dialogue. Architecture should be an experience, it has the potential to create societal awareness, make people think about their way of living, about their way of inhabiting space. It's my ambition in architecture to create this awareness and present the user with a design that not only facilitates inhabitable space but also generates ideas and thoughts. Architecture should be a physical and cognitive experience.</p> <p>The complexity of the Maassilo and the enormity of its size triggered me to (re)design the Maassilo by strengthening the relation of man versus building, or in this case the building as a machine. The new design of the Maassilo should first and foremost emphasize the human scale instead of the industrial size it now possesses. Besides addressing the human scale it has the possibility and the obligation to strengthen the relation between the building and the water. While this relation was incredibly strong in the twentieth century, now the river only separates the south from the north. The Maassilo should be a building that can make Rotterdam people proud again in a way that relates to the human scale but also strives towards a future where the water becomes an integral part of the city once again.</p> |
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Process

Method description

The studio Rotterdam Harbour is presented by the section of Heritage and Architecture. Like any other graduation studio, it is divided into five key moments (P1-P5) where the student presents according to mandated regulations. It can be roughly divided into three parts, respectively an analysis, a definition of the new program and a design. The research analysis for P1 consists of three components.

1. An architectural analysis, a building technical analysis and a cultural value assessment. (P1)
2. A programmatic research that results in a clear definition of the new program for the building. This approach shows the bigger picture of the design concept and addresses the primary problems of the case study. (P2)
3. A design-based process where there is a continuous feedback and reflection on the new design, which finally will result in a well-argued and structured design. (P3-P5)

I've chosen multiple methods to conduct research. For the P1 report, the lion's share was the result of literature research which consisted of consulting academical documents, articles, books, photographic essays, magazines, reports, digital footage and archived documents.

Analyzing the existing and historic situation helped us understanding the building and its complexity in a better way. During the whole process I will conduct field research that will consist of multiple site visits, photographs, drawings and sensory findings that will help with analyzing the experience of the building and its surroundings. For the P2 and the subsequent phases I'm planning to do research-by-design with the help of digital and physical modelling. This will help shape the building and help investigate which architectural, building technical and cultural value based decisions will have to be made. Lastly the use of literature and analyses of case studies will help me find useful material that can be implemented in the design process.

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

Answer to 1+2:

The preservation of heritage is an undeniable tendency within the field of architecture. It deals with contemporary issues like climate change, space shortage and the preservation of cultural identity. Redeveloping un-used or obsolete building by giving them a successive life reflects on our contemporary mindset of circularity and sharing. Since our resources are finite and our energy consumption is too high, we're obligated to re-use, re-structure and re-purpose our heritage in order to create a durable society. Furthermore, it poses an opportunity that prevents urban environments from becoming generic cities with no authentic identity. The Maassilo forms an interesting and relevant case study that incorporates these aspects, while dealing on a multitude of different scales.