# Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

# **Graduation Plan: All tracks**

Submit your Graduation Plan to the Board of Examiners (<u>Examencommissie-BK@tudelft.nl</u>), 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	Wenshun Cui	
Student number	5049121	

Studio		
Name / Theme	Complex Projects	
Main mentor	Manuela Triggianese	Architecture / Research
Second mentor	Hubert van der Meel	Building Technology
Third mentor	Eline Blom	Architecture / Design
Argumentation of choice of the studio	For my graduation project, I am interested in the entire design process from urban planning to specific architectures. Therefore I choose this studio to study how the city problem could be translated into architectural design logically with strong arguments for each design decision.	

Graduation project			
Title of the graduation project	Interrelated hub A multi-functional mobility hub that could contribute to the surrounding environment		
Goal	,		
Location: The posed problem,  research questions and	Mijnsherenplein, 3081 CJ Rotterdam  With the development of cities, more and more infrastructures are needed to achieve a coherent traffic network. These infrastructures are usually built elevated from the ground and create a large amount of leftover space underneath. These spaces create various problems such as low-quality space, divisions in urban planning, safety issues, and have a negative impact on the surrounding environment.  How mobility hub could be used to		
	activate the leftover spaces caused by infrastructures into public places?		

design assignment in which these result.

To use a mobility hub for activating the leftover spaces, four rationales could be established and further influenced future design decisions. Firstly, the circulation of mobility hub needs to be able to guide people into these leftover spaces. Secondly, some functions of mobility hub should be introduced into the leftover spaces. Thirdly, when designing the leftover space, the space characteristics such as the column and be beam structure should fully considered and used.

#### **Process**

#### **Method description**

Firstly, general research has been done by literature research and case study. Though that research, common rules for using mobility to activate the leftover space can be established. Secondly, a practical site analysis from the Rotterdam level to the specific site location has been done to have a clear overview of the site condition. Thirdly, through a deep study for the future development of the site, the program requirement for the project would be clear. Finally, different case studies according to the various programs in the project have been analyzed and researched. With the mass study and the proposed program relations, these researches could perform a solid foundation for the project to be further designed.

## Literature and general practical preference

The literature I focused on are mainly for the leftover space and mobility hub.

- 1. Aral, E. A. (2009). Redefining leftover space : value and potentiality for the city. VDM Verlag.
- 2. Trancik, R. (1986). Finding lost space: theories of urban design. New York: Van Nostrand Reinhold.
- 3. Richards, J., & MacKenzie, J. M. (1988). The railway station: a social history. Oxford University Press.
- 4. Triggianese, M., Cavallo, R., Baron, N. and Kuijper, J., (2018). Stations As Nodes. Delft: TU DElft Open. Retrieved from <a href="http://resolver.tudelft.nl/uuid:9aef29e0-3db5-4945-bdbd-bb48a5715156">http://resolver.tudelft.nl/uuid:9aef29e0-3db5-4945-bdbd-bb48a5715156</a>

The precedent projects I researched can be divided into three types. The first type of projects is aiming to help me understand how to activate the leftover space, the example project is A8erna, Koog aan de Zaan, Netherlands. The second type of projects could help me understand the program relations in mobility hubs, for instance, the Rotterdam Central Station, Rotterdam, Netherlands. The third type of projects is aiming to help me understand how to use mobility hub to activate the leftover space, for instance, the "Chuo line community and mobility station", Tokyo, Japan.

### 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 project topic is derived from the "migration of ideas" (studio topic). From my understanding of the "migration of ideas" it usually has two consequences after the migration. Firstly, the objects themselves will be affected and change through the migration process. Secondly, because the ideas are not derived from traditional environments, the migration of ideas could usually lead to new perspectives for solving the current problem. In my project, the station has changed its function into mobility hub from the migration, and the mobility hub as an idea has been migrated and used to solve the leftover space problem. The complex studio aims to intrigue us to derive ideas from urban issues and further integrate them into the project. Therefore, as my first attempt to think the architecture from the urban level, this project could provide more perspectives for me to perceive architecture in the future study.

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

The project is aiming to use mobility hub to solve the waster-land problem caused by infrastructure in urban planning. These problems can easily occur in the development process of each city. The results of this research and design could offer a new perspective to rethink the characteristics of infrastructure, leftover space, and mobility hub, while further preventing the land-waste in the current urban design and future urban planning.