# 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 | N.O. (Neva) Wardenaar |
| Student number | 4593308 |

| Studio | |
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| Name / Theme | Real Estate Management / Theme 8. User Perspectives |
| Main mentor | Dr. ir. M.H. (Monique) Arkesteijn MBA | Real Estate Management |
| | Prof. dr. ir. A.C. (Alexandra) den Heijer | Real Estate Management |
| Second mentor | Prof. dr. A.H. (Alfons) van Marrewijk | Design & Construction Management |
| Argumentation of choice of the studio | Throughout the master I developed an interest in the public sector. During the introduction presentations the subject "public clients as learning organisations" was presented. This topic was also related to a research project I was participating in and I wanted to investigate this further. | |

| Graduation project | |
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| Title of the graduation project | The use of knowledge transfer in campus real estate management about sustainability: designing a knowledge transfer tool to help campus real estate management with their real estate sustainability challenge. |
| **Goal** | |
| Location: | Dutch University Real Estate |
| The posed problem, | All universities in the Netherlands are struggling with the same problem in regards to their real estate; buildings are outdated, maintenance is deferred and they have to comply to the sustainability rules and regulations set by the government. Even though every university is facing the same problems, they all try to (re)invent the wheel themselves instead of exchanging knowledge with other universities. |

| research questions and | This results in the main research question: "How can inter-university knowledge transfer support university real estate managers to achieve the universities' sustainability goals?"<br><br>The sub-questions are:<br>SQ1: What are barriers, drivers and tools of knowledge transfer?<br>SQ2: What are the sustainability goals of university real estate according to their real estate strategy?<br>SQ3: How and to what extend are universities transferring knowledge to other universities about their real estate? |
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| design assignment in which these result. | The aim of this research is to discover if and how knowledge transfer between universities in the Netherlands in regards to the implementation of their real estate sustainability goals occurs. The goal of this study is to offer a suggestion for a knowledge transfer 'tool' to implement into the real estate strategy of Dutch university campus management. |

## Process

### Method description

**Type of study**

The research aims to find out the barriers and drivers in knowledge transfer between Dutch university real estate managers to propose an intervention/tool in this process. To achieve this, a qualitative, empirical research method will be performed to analyze the knowledge transfer process as it happens right now.
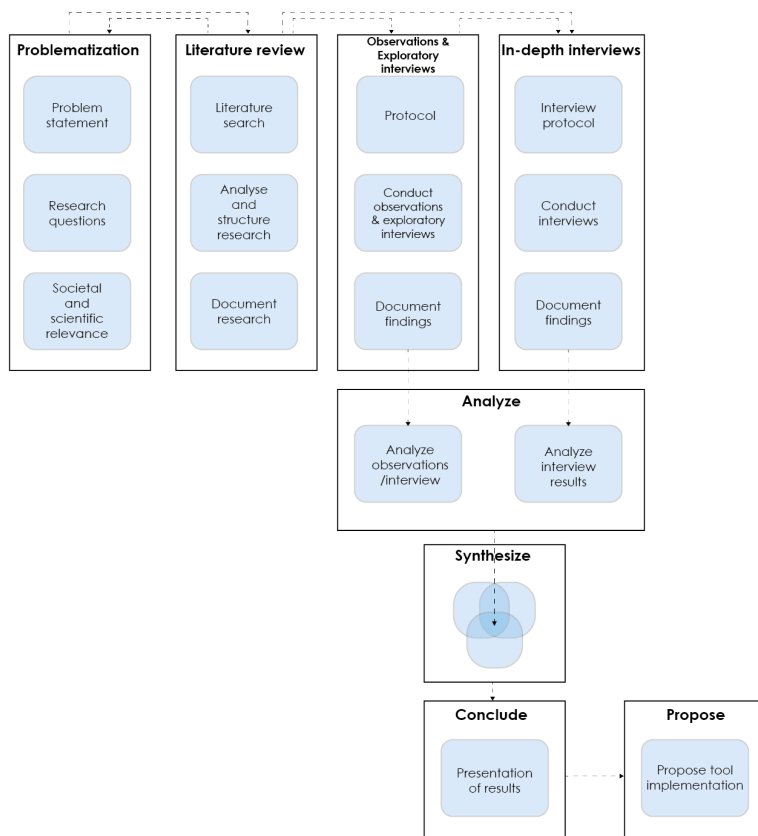
**Research method**

*Figure 1. Research framework. Own figure*

Figure 1 provides an overview of the research framework. A literature review will explain knowledge transfer and the different barriers and drivers that come with knowledge transfer. Hereafter, an empirical research is conducted to understand the sustainability challenge of university real estate departments and provide insight in how universities transfer knowledge. This consists of two components. First, a desk-research will be conducted to explore the real estate strategies of universities and to gain insight in the current state of university real estate. Second, the field work will go more in depth on how knowledge transfer between university real estate departments works. This will be done through observations and interviews. In the final part of the research, interpretation of the research findings will be described, conclusions will be drawn and an implementation will be tested and evaluated.

## Literature and general practical preference

With a literature study, a better understanding of the main subjects will be gained. It will serve as a possible source of ideas or theories (Blaikie & Priest, 2019) about knowledge transfer. The literature consists of several papers retrieved from Scopus, TU Delft repository, and Google Scholar. The literature was searched based on the following keywords; knowledge management, knowledge governance, knowledge transfer, inter-organisational knowledge transfer, barriers, drivers, universities, sustainability, circularity, strategies, organisational learning, campus real estate, and competitive advantage. These keywords are searched individually and in different combinations such as "inter-organisational knowledge transfer AND universities", and "sustainability AND university campus real estate". Next to an understanding of the topic, the literature study also forms the basis for the observations and interview questions.

# 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 Management in the Built Environment department strives to have a sustainable built environment. Within the master track different solutions for developing and maintaining the buildings and portfolio are being learned. The master track Architecture Urbanism and Building Sciences is known for exploring innovative ways to create a more sustainable environment. The topic of this thesis is exploring knowledge transfer between university real estate managers on the sustainability of their buildings. This a new and innovative way for real estate managers to use in managing their real estate portfolio.

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

**Societal relevance**

The sustainability challenge is something that everyone needs to comply to and to make it happen collaboration is needed. However, at this moment is not going as fast as needed. Universities have a social responsibility to solve societal challenges and improve sustainable development.

Knowledge transfer is an important process for people in order to learn and innovate. However, people need to be motivated to do so, otherwise it will not work. Knowledge sharing helps working together and building shared knowledge. Also, it stimulates to find innovative ways to improve property. By transferring knowledge, communities are built and a learning culture arises. Knowledge transfer also creates better experiences and makes people feel good. Knowledge sharing can help creating innovative solutions and working together on the same subject.

Because of the social responsible character of universities examples can be set for the rest of the social sector. Knowledge transfer can also be useful between other types of social real estate such as the Dutch Government Real Estate Agency municipalities, and hospitals for example.

**Scientific relevance**

This research is scientifically relevant since there is a limited amount of research on knowledge transfer between universities. Curvelo Magdaniel et al., (2019) even suggest that more research into knowledge management in campus management of universities is needed. Next to that, the topic of sustainability is one that is relevant for the whole world and rules and regulations are set. Everyone drives the same boat, but it is not necessary for everyone to reinvent the wheel themselves. That is why knowledge sharing is so important. Universities are knowledge sharing institutes, and work together on different types of research. However, it is not widely known if this is also the case in regards to their real estate. By doing research on how this can be done, knowledge can be added to the academic knowledge database on knowledge transfer and knowledge management. This research can also be seen as an exploration for the new CampusNL-research in which knowledge transfer between the 14 Dutch universities will also be research.

**References used in this graduation plan**

Blaikie, N., & Priest, J. (2019). *Designing Social Research: The Logic of Anticipation*. Polity Press.

Curvelo Magdaniel, F., Den Heijer, A., & Arkesteijn, M. (2019) Information to support strategic campus management in universities. *Journal of Corporate Real Estate, 21*(3), 212-233. https://doi.org/10.1108/JCRE-10-2018-0038