

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	Lisa Peek
Student number	4846338

Studio	
Name / Theme	Design of the Urban Fabric / How will we live together?
Main mentor	Birgit Hausleitner Urban Design
Second mentor	Marcin Dabrowski Spatial Planning and Strategy
Argumentation of choice of the studio	<p>My first choice will be the studio of planning Urban Fabrics. My main reason is that I want to work site specific on a topic about mix used areas. Mostly I want to focus on the mix of functions between work and living spaces. I'm going to do an internship at the province of South-Holland, so my idea is to use the whole province to do my research on and then choose some interesting areas to go more in depth on this locations. Going through the skills is something that fits me and the studio.</p> <p>During the introduction of this studio I started to get really excited about the theme "how will we live together", because that corresponds to my questions about living on a more industrial site. I believe that a transformation is more than just creating a new building or reusing the construction. I think it has to do with providing inhabitants with a new way of living related to for example infrastructure and leisure.</p> <p>In addition, I'm curious to what kind of scenarios this will lead me and which options could be used in the future. To start with some possible, maybe not very probable idea and then narrow that down to a more desirable vision of the future.</p> <p>I hope that, with the knowledge from this studio, mentors and my internship, I can contribute to a new way of living and working which the province can implement in many ways.</p>

Graduation project	
Title of the graduation project	Mix to the max, or max to the mix? <i>A research by design in to spatial conditions that should be implemented by the transformation to mixed-use business parks.</i>

Goal	
Location:	Province of South-Holland, with research locations at business parks in The Hague, Zoetermeer and Bodegraven.
The posed problem,	The Netherlands is currently dealing with a housing crisis, which creates long waiting lists and increasing housing prices. In addition, the Province of South-Holland is loved for its employment opportunities, mobility network and metropolitan urban fabric and therefore attract new residents. However, these urban qualities also contribute to a wished business climate, which is attractive to companies to settle and asks for space to grow. These three factors result in scarcity of land where the spatial pressure is high. The result is a tension between space for working and living. This asks for an innovative way of using space in a multifunctional way, while creating a circular economy and realising liveable environments.
research questions and	<p><u>Research question:</u> What spatial conditions should be implemented in the transformation to a (liveable and) mixed-use business park by 2050?</p> <p><u>Sub questions:</u></p> <ul style="list-style-type: none"> • In what way is mixed-use related to urban qualities? • What makes a place liveable? • What spatial preconditions are there for a viable circular economy? • What are the interests of actors while designing mixed-use business parks? • What are general future trends for industry?
design assignment in which these result.	<p>The aim of this thesis is to realise a strategic framework to create a holistic strategy for the Province of South-Holland on how to deal with several mixed-use typologies. This strategic framework is not only spatial, but also shape the timeline till 2050.</p> <p>In order to provide a more detailed recommendation, there will be three research locations (Binckhorst, Lansinghage, Broekvelden) within this network in the province. References will be used to give an</p>

indication what the spatial implementations could look like.

Lastly, the Province of South-Holland want to write policies on this topic as well. Therefore, I think it can be useful for this thesis to for a starting point in this. In that way, well balanced liveable mixed-use business parks can contribute to the change to a circular economy.

Process

Method description

This thesis will use fieldtrips to contextualise the specific research locations. In addition, literature review, interviews, trend analysis, policies and documents review and, the internship are used to get an understanding of the different concepts and how they contribute to the Province of South-Holland. This also helps to find the knowledge gaps and, social and scientific relevance. In order to see what these concepts mean for a design, multiscalar mapping, reference projects, research by design and scenario construction will be used. Lastly, the stakeholder analysis will be applied to see what stakeholders influence the project and which interests they have at the research locations.

Literature and general practical preference

Main literature:

College van Rijksadviseurs. (2019). *Guiding Principles Metro Mix*.

<https://www.collegevanrijksadviseurs.nl/adviezen-publicaties/publicatie/2019/04/11/reos-advies>

Davis, H. (2020). *Working cities: architecture, place and production* (H. Davis, Ed.; 1st ed.).
Routledge.

De Zwarte Hond, & Provincie Zuid-Holland. (2021). *Inspiration book for a qualitative mixed-use*. (NL: *Inspiratieboek voor een kwalitatieve functiemix*).

Gedeputeerde Staten. (2021). *Urbanisation strategy South-Holland 2021-2040*. (NL: *Verstedelijkingsstrategie Zuid-Holland 2021-2040*)

Hill, A. V., Croxford, B., Domenech, T., Hausleitner, B., Meijer, H., Orban, A., Munoz Sanz, V., Vanin, F., & Warden, J. (2020). *Foundries of the Future: a guide to 21st century cities of making* (A. V. Hill, Ed.).
TU Delft Open.

Louw, E. (2015). *Efficient use of space at business parks*.
(NL: *Efficiënt ruimtegebruik op bedrijventerreinen*)

Moreau, V., Sahakian, M., van Griethuysen, P., & Vuille, F. (2017). Coming Full Circle: Why Social and Institutional Dimensions Matter for the Circular Economy. *Journal of Industrial Ecology*, 21(3), 497–506. <https://doi.org/10.1111/jiec.12598>

Ramboll. (2022, August 22) *What makes a city liveable?*. <https://ramboll.com/ingenuity/what-makes-a-city-liveable>

Van den Berghe, K., Dabrowski, M., Ersoy, A., Wandl, A., & van Bueren, E. (2019). *The Circular Economy: a Re-Emerging Industry?*

Van den Berghe, K. B. J., & Verhagen, T. J. (2021). Making it Concrete: Analysing the Role of Concrete Plants' Locations for Circular City Policy Goals. *Frontiers in Built Environment*, 7.

<https://doi.org/10.3389/fbuil.2021.748842>

Interviews:

- Eric Terlien (20-12-2022): *Strategic advisor spatial planning at the Province of South-Holland.*
- Karel van den Berghe (06-12-2022): *Assistant professor spatial planning and urban development TU Delft. (Workshop and fieldtrip at Binckhorst)*
- Barend Jansen (all year, supervisor Province of South-Holland): *Combat stacking of norms, guideline thinking and juridification in the spatial domain. (Ruimtelijke verkenning en agendering)*
- Mariana Faver Linhares (All year, supervisor Province of South-Holland): *senior policy officer at the spatial exploration and scheduling department. (Ruimtelijke verkenning en agendering)*

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.

1)

The relation between my topic and the studio topic is very clear. Like I said before, I want to deal with the spatial pressure between working and living. To realise a liveable environment there is more space needed. However, literature claims that to develop a circular economy also space is necessary. This addresses the question: How will we live together? What is the right balance between these functions and how can we design that?

To do so, I need the skills that I learned during the first year of the master. At Urbanism we were taught on using multiple scales to create not only a working design, but also that this will contribute and collaborate with other networks. That is why I design for the Province of South-Holland, the business parks next to the A12 and specific on example locations. In that way I can provide a multiscale research by design to deals with several layers of our society.

Blending the knowledge that I extracted from literature and skills that I use to design is something that is the overall goal from the maser programme. With this I will address the socio-economic structure of the Province of South-Holland and try to explore innovative options to realise a sustainable environment.

2)

The relevance of my graduation project is mainly focused on what possible, probable and desirable options there are to implement mixed-use at business parks. Nowadays, the right balance between working and living is not yet discussed. There are a lot of different stakeholders which have a different opinion on this. In addition, the industry at business parks mostly just disappear when dwellings are added, so with this thesis I want to address another standing point and advocate for the importance of production in our cities. Besides, literature only describes design principles or pattern languages, but often the urban design and how it works on a specific location is missing. With the research by design at example projects, I want to show how this can work. On the larger scale, the collaboration between different business parks will be explained and how this contributes to the economy of the Province of South-Holland.

Because I deal with a lot of stakeholders, and some that are not even there yet. That is why I have to keep in mind that not everything can be mixed and that maybe a maximum has been reached at some places. However, the Netherlands also has a housing shortage, so I will try to add as much dwellings as possible to reduce the pressure on the housing market.

Regarding the circular economy, literature claims that it takes more space, but nowhere is written what amount of space and how we should deal with this. Therefore, I feel the need to make this more explicit and see how this can fit within the design of a mixed-use business park.