

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

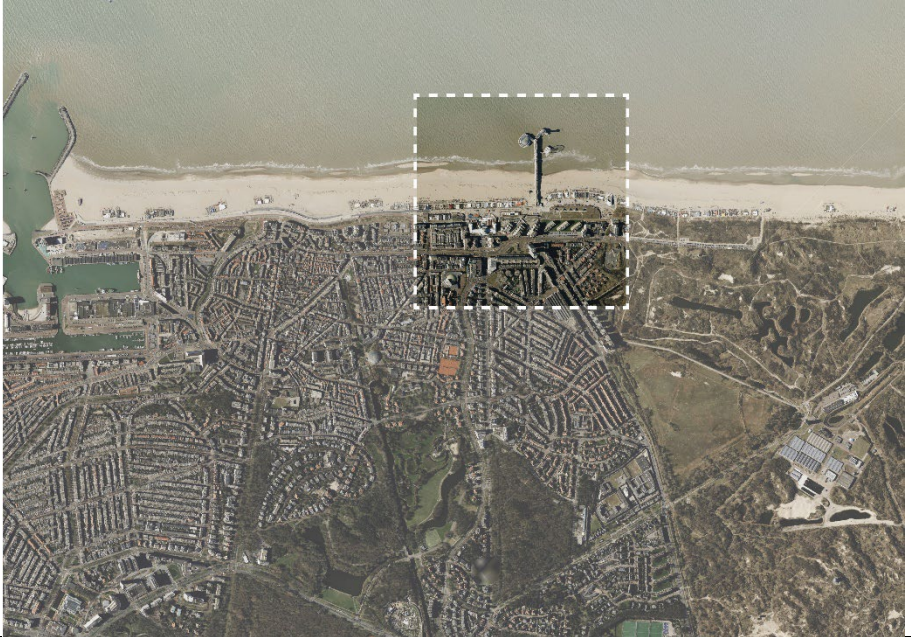
Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Luc Waalders
Student number	5881536

Studio		
Name / Theme	Design of the Urban Fabric	
Main mentor	Leo van Den Burg	Urban Design
Second mentor	Gerdy Verschuure-Stuip	Landscape Architecture
Argumentation of choice of the studio	<p>My choice for the studio is Design of the Urban Fabric. I was very much in doubt between DoUF and Metropolitan ecologies of place. About DoUF I like the 1:500 scale. I've done many projects on similar scales and it also is a scale that I see myself working on in my further career. Eventually, that was the decisive factor for me to choose for this studio.</p> <p>Within this studio I feel very comfortable with drawing on the plan but would love to develop my skills in drawing sections and perspectives. I was in doubt whether I wanted to put my focus this year on developing skills in the field of research and data analytics/GIS which would have fitted better to the MEP studio or focussing more on the scale of the urban fabric, focussing on more practical skills as hand/computer drawing, model making and developing my conceptual knowledge in the field of urban design. Both of these seem very interesting to me, but since I see my future in the field of urban design, I think it would be more practical to put my focus now on mastering the design of the urban fabric. Also to have a more representative project to enter the work environment of an urban design firm after my studies.</p>	

Graduation project	
Title of the graduation project	Balancing the Tides: A Harmonious future for Scheveningen's Seaside Resort
Goal	

Location:	<p>The coastal resort in Scheveningen</p> 
The posed problem,	There is an imbalance between the spatial organisation of the seaside resort and the needs of local businesses, tourists, residents, and natural ecosystems.
research questions and	How can the spatial organisation of the seaside resort be optimised to balance the needs of local businesses, tourists, residents, and natural ecosystems?
design assignment in which these result.	The assignment for the design is to adapt the resorts spatial organisation in a way that meets and balances the needs of local businesses, tourists, residents, and natural ecosystems?
<p>[This should be formulated in such a way that the graduation project can answer these questions. The definition of the problem has to be significant to a clearly defined area of research and design.]</p>	
Process	
Method description	
<p>Methodology</p> <p>This chapter describes the methodology of the project, incorporating various methods derived from urban planning theory. Some methods were adopted in their entirety and applied directly to the project site, while others were partially adapted to emphasise insights specific to the context of the project location.</p>	

The project structure consists of four phases: analysis, design experiments, vision, and the design phase. The first phase involves an analysis of the site, aiming to achieve a comprehensive analytical overview of the project location.

The key research question in this phase is:

- What does the identity of the seaside resort consist of?

To answer this question, the analysis examines the components of place within the Scheveningen seaside resort. The basis for this analysis method lies in Montgomery's *components of place* (1998). Which states that a place not only consists of its physical spatial attributes, but also of the activities occurring within it, and the meaning that the place holds for its users. In *Genius Loci* by Christian Norberg-Schulz (1979), this definition of place is expanded. He describes how the *spirit of place* transforms a space into a meaningful location.

A comparison of these theories reveals overlapping elements. Both distinguish between spatial and non-spatial attributes of place. Montgomery refers to these as the physical components of place, while Norberg-Schulz identifies the remaining non-tangible elements as the *spirit of place* or *genius loci*. Montgomery further subdivides these intangible aspects into the activities occurring within a space and their significance to its users.

Methods of analysis

The analysis seeks to answer the research question by investigating Montgomery's three components of place to provide a holistic representation of the seaside resort. This includes an evaluation of the physical attributes alongside the *spirit of place* as described by Norberg-Schulz. The sub-questions guiding this section are:

- What does the physical form of the seaside resort consist of?
- What does the activity within the seaside resort consist of?
- What does the meaning of the seaside resort for its users consist of?

A key method applicable to all three questions is fieldwork. During multiple visits to the seaside resort, observations are made of its physical form, activities, and the meanings attributed to it by its users. These aspects are documented and analysed using eye-level photography. Besides, also transitions between different parts of the resort provide further insights, which are described in this part of the analysis.

Physical Form Analysis

The analysis of the resort's physical form also incorporates a historical analysis, comparing the spatial structure of the seaside resort across different time periods and examining how the resort developed over time. This is followed by a morphological analysis that investigates how the Scheveningen seaside resort integrates with the surrounding urban network, its ecological infrastructure and the characteristic Dutch coastal landscape.

Additionally, a massing analysis is conducted to provide insights into the resort's contemporary three-dimensional form. This includes the construction of a 1:1000 scale model to illustrate height variations, proportions, and the interplay of light and shadow within the resort. Based on the results of these methods, the first sub-question of the analysis can be answered.

Activity analysis

Fieldwork also underpins the analysis of influential activities within the resort. Observations of activity and inactivity in public spaces are documented through eye-level photography. An extensive stakeholder analysis complements this by combining methodologies from Geurtsen & Bos (1981) and Lynch (1960).

In *The Image of the City*, Lynch analyses the challenges of Boston's urban image through a method called mental mapping, using interviews and observations to create schematic maps that identify paths, edges, districts, nodes, and landmarks. A modified version of this method is applied in this research. The most relevant stakeholders are divided into four groups: residents, local businesses, tourists, and nature. Based on Swarbrooke's (1999) sustainable tourism model, which is supported by the UNWTO (n.d.).

From these four different perspectives, the seaside resort is analysed and the findings are visualised in the same kind of maps as Lynch's, consisting of paths, edges, districts, nodes and landmarks. Since nature cannot participate in interviews, interviews as an input method were abandoned, and the findings are based on personal observations.

The difference between Lynch's method and Geurtsen & Bos's method is that in their research, they do not reduce space to an abstract network of paths, edges, districts, nodes and landmarks as Lynch does. Their analysis depicts the physical spatial form of urban objects, such as streets and buildings, to scale. In this project, this method is applied in addition to Lynch's approach to emphasise under which spatial conditions the activities of different stakeholders take place.

In addition to these two methods for mapping the activity of various stakeholders, the stakeholder analysis was also conducted through interviews. One qualitative interview was held with an employee of the Municipality of The Hague who is involved in the implementation of the *Coastal Action Plan* (Municipality of The Hague, 2024). Due to her engagement with the area, she possesses in-depth knowledge of the issues affecting the seaside resort and the stakeholders involved.

The stakeholder analysis is followed by a socio-demographic analysis that addresses developments within the resort. This looks at relevant statistical data regarding the stakeholder groups that emerged from the stakeholder analysis and Swarbrooke's model.

This is followed by a literature review of relevant paradigm shifts. This involves major structural activities of the identified stakeholders. It looks at the impact of climate change on the seaside resorts. It also examines the extent to which the decline of seaside resorts is still ongoing and the extent to which the countermovement responding to this is applicable to the resort in Scheveningen. Based on the results of these methods, the second sub-question can be answered.

Meaning analysis

The final section examines the local identity and meaning of the components of the seaside resort for its users. This includes an analysis of the symbolic and cultural significance of the seaside resort. The method used for this is a literature review. On the basis of this, the cultural heritage of the seaside resort is researched. This is done on the basis of a literature review of the historical background of the resort, an analysis of historical photography from The Hague city archives and a literature review of local traditions. In addition, also the findings of the fieldwork on the local identity and cultural heritage were analysed. Based on the results of these methods, the third sub-question can be answered.

Using these different methods of analysis, the answer to the key question of the analysis can ultimately be derived from the answers of the sub-questions.

Defining the Problem Statement

Based on the conclusions of the analysis, the analysis can be followed by the definition of a problem statement. The analysis shows that there is a great contrast between the spatial organisation of the resort and the needs of the individual stakeholders. Based on this, the problem statement is defined as:

‘There is an imbalance between the spatial organisation of the seaside resort and the needs of local businesses, tourists, residents, and natural ecosystems.’

The stakeholders mentioned in this statement correspond to those in Swarbrooke’s (1999) model for sustainable tourism. Furthermore, the analysis indicates a significant overlap of interests between tourists and the local economy, leading to these groups being frequently referred to collectively throughout the project.

Design Experiments

Based on the problem statement, design experiments are conducted, some of which are inspired by a series of excursions. These experiments are described as *what if...?* scenarios. This approach, known as *Scenario Thinking*, was introduced by Kahn & Wiener (1967) and is used to explore various possibilities in urban development.

The scenarios explored in this section of the report include:

- *What if the spatial organisation of the seaside resort is transformed to meet the needs of local businesses and tourists?*
- *What if the spatial organisation of the seaside resort is transformed to meet the needs of the residents?*
- *What if the spatial organisation of the seaside resort is transformed to meet the needs of natural ecosystems?*

Another method used for developing these scenarios is the *Maximisation Method* (Schwartz, 2002), which refers to a decision-making style where stakeholders aim for the optimal solution by thoroughly researching alternatives and evaluating their implications for the involved stakeholders.

Design Assignment

Based on these scenarios and the associated trade-offs, a design assignment can be drawn up. This is then further developed into a vision for the future of the Scheveningen seaside resort. This vision is then further developed into a master plan with various zoom-ins and a phasing strategy.

Literature and general practical references

Lynch, K. (1960). *The image of the city*. MIT Press.

Norberg-Schulz, C. (1979). *Genius loci: Towards a phenomenology of architecture*. Rizzoli.

Montgomery, J. (1998). Making a city: Urbanity, vitality and urban design. *Journal of Urban Design*, 3(1), 93–116. <https://doi.org/10.1080/13574809808724418>

Geurtsen, R. and L. Bos (1981). Kopenhagen, dubbelstad. Een bewerkte reisindruk [Copenhagen, double city. An edited travel impression] In: Wonen-TABK (10-12)

UNWTO. (n.d.). *Sustainable development of tourism*. United Nations World Tourism Organization. Retrieved January 18, 2025, from <https://www.unwto.org/sustainable-development>

Swarbrooke, J. (1999). *Sustainable tourism management*. CABI Publishing.

Kahn, H., & Wiener, A. J. (1967). *The next thirty-three years: A framework for speculation*. Daedalus, 96(3), 705–732.

Schwartz, B., Ward, A., Monterosso, J., Lyubomirsky, S., White, K., & Lehman, D. R. (2002). Maximizing versus satisficing: Happiness is a matter of choice. *Journal of Personality and Social Psychology*, 83(5), 1178–1197. <https://doi.org/10.1037/0022-3514.83.5.1178>

Municipality of The Hague. (2024). *Coastal Action Plan 2024*. Retrieved 1 January 2025, from <https://www.denhaag.nl/en/districts/scheveningen/action-plan/>

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.

Reflection:

In this reflection, I review the progression of my thesis up to the P2 stage, considering both my personal approach and its alignment with the Master's programme in Urbanism. I am still very satisfied with the chosen location and subject matter and I think that they complement each other well. Additionally, the site offers substantial potential for implementing ideas gathered from my analysis and theoretical research.

Following the P1 phase, I encountered challenges in effectively advancing the project. The decision to develop scenarios served as motivation to conduct the necessary analyses. However, due to the extensive nature of these analyses, I have yet to finalise the scenarios, which currently remain in a conceptual phase. Moreover, I am striving to structure my narrative coherently, while many components are in place, they require further development.

My objective is to conclude the analysis promptly and deepen the scenarios, thereby allocating enough time for formulating the vision and design. At this moment, I am getting most of my enthusiasm from developing and comparing concepts and alternatives for the site's approach. In the upcoming months, I aim to dedicate as much time as possible to further deepening this approach, ultimately delivering a plan that balances the stakeholders' needs effectively.

Regarding the relationship between my research and the Master's in Urbanism, I notice that many topics that were addressed during the masters come together at my project location: the demand for densification, addressing climate change, the need for a liveable residential environment, and fostering a resilient economic climate in a tourist hotspot. This broad scope results in a wealth of literature across these diverse subjects. I acknowledge that it is not possible to investigate every aspect of these topics; therefore, my focus is on ensuring a well balanced and equal depth of coverage for each of these topics within my research.

Societal and scientific relevance:

The Scientific Relevance of Revitalising Scheveningen's Coastal Resort

The revitalisation of the Scheveningen seaside resort provided an opportunity to contribute to scientific research in urban planning, urban design, landscape architecture and social sustainability. Through the complex interplay of natural ecosystems, touristic activity and residential life in the context of a location under pressure from a rising sea level, this project contributes to a growing body of knowledge on sustainable coastal site design. Moreover, it provides a living laboratory for testing new approaches to balance ecological, social and economic needs in coastal environments. In this way, the research can contribute to the ongoing movement to revitalise coastal resorts along the North Sea.

Advancing Coastal Ecology and Conservation

Coastal environments represent one of the most biodiverse and ecologically significant ecosystems on Earth, yet they are also among the most vulnerable to anthropogenic pressure. This project focusses on environmental restoration to enhance the scientific understanding of how nature-based solutions can mitigate the effects of coastal degradation.

For instance, by applying interventions that enhance dune reconstruction, and the integration of green infrastructure and biophilic design into the urban fabric. This can provide the essential knowledge to enhance biodiversity within our cities. These insights are particularly relevant in the context of climate change, as they can improve strategies to transform Northern European coastal towns to connect better to their surrounding dune landscape and become more climate resilient.

Contributing to Urban Sustainability and Resilience

The revitalisation of the resort also has relevant implications for the study of sustainable urban development. Coastal towns in the Netherlands are facing unique challenges due to their high dependence on changing climate conditions, high population densities, and tourism pressure. This project provides a case study that integrates resilience thinking in the field of urban design and the context of a rising sea level. By approaching the project from different stakeholder perspectives, the project aims to bridge their differences and find harmonious solutions for varying spatial issues.

Informing Sustainable Tourism and Socioeconomic Research

Tourism is the most relevant driver of economic activity in coastal resorts, but its environmental and social impacts are a growing threat to their social and ecological sustainability. This project addresses key literature related to the development of a sustainable tourism model in the context of European coastal resorts. This also dives into the question of how to balance economic stability with environmental preservation and community well-being.

By implementing and studying strategies for off-peak tourism promotion and a more diverse supply of tourism facilities that aim for customised touristic experiences, the project contributes to the literature on sustainable destination management. Additionally, the focus on economic diversification offers insights into how coastal communities can reduce their dependency on fluctuating seasonal and domestic tourism patterns.

Conclusion

The revitalisation of Scheveningen's coastal resort is scientifically relevant because it combines and contributes to the body of knowledge on coastal ecology, urban resilience, and sustainable tourism. By addressing complex global challenges, the project provides valuable insights that contribute to scientific knowledge that is relevant on both local and international scales. Its findings aim to inform future research and inspire innovative approaches to sustainable and inclusive coastal development.

Societal relevance:

The Societal Relevance of Revitalising Scheveningen's Coastal Resort

The revitalisation of Scheveningen's coastal resort is a complex task, balancing between environmental conservation, urban development, community well-being and sustainable tourism. Coastal resorts such as the one in Scheveningen are known for challenges that contemporary urban spaces are facing. They must cater to the needs of a diverse range of stakeholders, including

residents, visitors, local businesses, while simultaneously addressing pressing environmental concerns. Therefore, this project has a significant societal relevance, as it aims to explore sustainable and inclusive design solutions for coastal regeneration that balances the often conflicting priorities of nature, local businesses, residents, and tourists.

Environmental Stewardship and Climate Resilience

One of the main societal issues addressed in this project is the urgent need for environmental stewardship. Coastal environments are particularly vulnerable to the impacts of climate change, including sea level rise, and coastal erosion. Scheveningen, as a dense residential area, and a prominent tourist destination with up to 160.000 visitors on peak days (Municipality of The Hague, 2024), faces the complex challenge of mitigating environmental degradation while preserving its cultural heritage. This project aims to include climate resilience in into the revitalisation strategy in order to strategically enforce the level of long-term sustainability. By protecting dunes, promoting biodiversity, and implementing more sustainable types of infrastructure, the project aligns with the United Nations' Sustainable Development Goals (2015).

Moreover, the emphasis on preserving and promoting the natural environment enhances the connection between people and their surrounding ecosystems, resulting in a more widespread ecological awareness. Coastal ecosystems provide essential societal services, including carbon storage and flood defence. This is of critical importance to the well-being of human communities and natural habitats. By prioritising nature-based solutions, the project underpins the societal importance of coexisting harmoniously with our natural environment, especially in dense residential environments and touristic hotspots.

Enhancing Community Well-being and Social Equity

Equally significant is the project's aim to respect the needs of the resort's inhabitants. Coastal revitalisation projects can often lead to unintended social consequences, such as gentrification. This project aims to counteract this development by prioritising inclusivity and social equity. Living by the sea is part of the everyday life of Scheveningen's residents and should not be allowed to turn into a free market-driven real estate trade in which only a privileged minority can afford to live in the seaside resort.

The enhancement of the public domain, the promotion of affordable housing, and the provision of services tailored to local needs are central to fostering a sense of belonging and ownership among residents. Improved infrastructural organisation and access to a variety of recreational outdoor spaces, such as pedestrian-friendly promenades, and parks and the accessibility of characteristic local landscape elements, can boost mental and physical well-being. This holistic approach to urban regeneration underpins the societal value of prioritising the lived experience of residents in urban revitalisation projects (Evans, 2005).

Sustainable Tourism and Economic Vitality

As a popular tourism destination, Scheveningen's resort is an integral component of the local and regional economy. However, unrestricted tourism growth can cause social and environmental pressure, and erode the character of the area. Therefore, this project explores the possibilities to

achieve a more sustainable type of tourism, that addresses the relevance of sustainable tourism mobility and diversifying the resort's economic foundation.

By integrating eco-friendly tourism initiatives and green transport options, the project contributes to a more resilient economic model. Additionally, efforts to promote cultural heritage, local businesses and off-season vitality help to enhance the resort's economic stability.

Bridging Global and Local Perspectives

Scheveningen's revitalisation also has a broader societal relevance by serving as a living lab where global challenges are addressed at the local scale. Coastal regions worldwide are dealing with the effects of urbanisation, environmental degradation, overtourism, and economic instability. The strategies and solutions implemented in this project can inform communities who are facing similar challenges.

Conclusion

In conclusion, the societal relevance of the revitalisation of Scheveningen's coastal resort is reflected by the project's aim to balance environmental conservation, community well-being, and economic vitality. By addressing the needs of various stakeholders, the project explores sustainable solutions and translates them into clear actions to enhance the long-term resilience of Scheveningen's coastal resort.