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	Silva Haarbosch
Student number	5638895

Studio		
Name / Theme	Architecture for the European City Tallinn, Estonia Methods of Analysis & Imagination	
Main mentor	Willemijn Wilms Floet	Architecture
Second mentor	Niels Tilanus	Building Technology
Argumentation of choice of the studio	My interest in the studio Methods of Analysis and Imagination derives from curiosity and the urge to step outside my comfort zone, to enrich my knowledge and abilities. This curiosity results from my educational history. Which is as follows; After secondary school, I went to study at Avans University of Applied Sciences in 's-Hertogenbosch. During this four-year study, I mainly gained knowledge relating to the technical aspects within architecture. Only one small course was architectural design oriented. While I participated in the first year of the master at Technical University Delft, I was introduced to students using other analysis and design methods, but I stuck to what was familiar to me, pragmatic design. Still, I was keen to explore whether other methods would suit me too, so I wanted to take part in the elective 'Tools of the Architect' from the chair of Methods of Analysis and Imagination. Unfortunately, this didn't work out, but it did make me attend the information sessions of the Methods graduation studio. Partly because of the freedom within the studio, but also because of the interest in challenging myself and exploring what suits me as an architect, I decided I wanted to take part in the graduation studio 'Methods of Analysis and Imagination'.	

Graduation project	
Title of the graduation project	FloraAquafront: Where Nature and Water Sports Unite in the coastal zone of Tallinn.

Goal	
Location:	The project site is located on the city's waterfront in the Sadama district in Tallinn, Estonia. The site is situated East from the well-known Linnahall, a now out of use Soviet-era concrete concert and sports venue, and west from the guest harbour area.
The posed problem,	For years, the connection between Tallinn's city centre to the sea was limited and controlled by the Soviet government, which limited public access to the coastline and waterfront areas. Since 2007 the urban development plan called 'Opening Tallinn up to the sea' has been observed, it is up to urban planners and architects to act accordingly. In addition, according to Andrès Ojari, head of Architecture and Urban Planning Curriculum in Estonian Academy of Arts, there is a need of more water sport facilities as there is a queue for registration at Tallinn's largest water sports club, among others. In the city of Tallinn is a need to enhance the connection between the City and the sea, provide increased water sport opportunities, and align with Tallinn city council's vision of 'Opening Tallinn to the sea'. This specific project location was not considered when refurbishing the coastal zone creating this gap in the coherence of the city council's vision.
research questions and	'How can the development of a water sports centre improve the coastal zone, fostering physical activity, social interaction and nature inclusivity in Tallinn?'
design assignment in which these result.	The design assignment is to design a water sports center on the waterfront of the Sadama district of Tallinn in Estonia, with a primary focus on the

	integration of the building and the additional activities with the surrounding natural environment, taking nature-inclusive design as a starting point for the spatial design.

Process

Method description

In this graduation project, the research and design methods and techniques are meticulously planned to ensure a comprehensive understanding of the project's requirements and to inform the architectural choices effectively. Here's a description of the key methods and techniques that will be or are utilized:

1. **Location Analysis:** A critical component of the project is the comprehensive location analysis conducted to identify the ideal site for the water sports center in Tallinn. The information obtained during site visits and online research will be documented by two-dimensional drawings, which must contain the following themes: access and circulation, orientation, utilities and infrastructure, noise and pollution, public and private spaces, views and vistas. The chosen location reflects an optimal balance between accessibility for users, accessibility to the water, ecological sensitivity, and the potential for fostering a strong connection between the community and the natural environment.
2. **Study of Reference Projects:** This involves an analysis of existing water sports centers. The focus of these precedence studies is on understanding, not only the themes mentioned above, but also scale, functionality and spatial requirements. By analyzing these aspects, the project gains insights into the effective design and operational flow of water sports centers, ensuring that the proposed design is not only aesthetically pleasing but also functional.
3. **Material and Equipment Research**: A practical aspect of the project is the research into the materials and equipment used in various water sports. This research is targeted at understanding the spatial needs for storage and accessibility. By analyzing the dimensions and storage requirements of this equipment, the project can ensure that the design includes adequately sized and easily accessible storage areas. This not only enhances functionality but also contributes to the safety and efficiency of the water sports center.
4. **Seasonal Climate Analysis:** The project undertakes a detailed study of the local climate, segmented into the different seasons, and further divided into the distinct layers of sea, land, and sky. This comprehensive approach includes gathering data on temperature variations, prevalent activities in each season, and researching the presence of specific flora and fauna. the information found will be compiled into a set of cards that will serve as a crucial handle for making architectural decisions, particularly in designing spaces that are comfortable and responsive to the seasonal changes in the environment. It

also aids in understanding the natural context of the site, ensuring that the design is in harmony with its surroundings.

Overall, This approach guarantees a design that is not only innovative and aesthetically pleasing but also deeply rooted in functionality and environmental sensitivity.

Literature and general practical references

Literature:
Corner, J. (2011). The Agency of Mapping: Speculation, Critique and Invention.

Ferrarini, A. (2021). Positions in practive: towards more inclusive built environments in Belgrade.

Havik, K., & Moura, C. M. E. (2023). Repository: 49 Methods and Assignments for Writing Urban Places. Nai010 Publishers.

Hein, C. (2023). Port City Atlas: Mapping European Port City Territories: from Understanding to Design. Nai010 Publishers.

Helsinki CXity Executive Office (2019). Helsinki Maritime Strategy. Helsinki: Helsinki City Executive Office.

Images. (2017). Waterfront Promenade design: Urban Revival Strategies.

Kuipers, M., & De Jonge, W. (2017). Designing from Heritage: Strategies for Conservation and Cenversion.

Llywodraeth Cymru Welsh Government. (2016). Site & Context Analysis Guide: Capturing the value of a site.

MAJA - Estonian Architecture Review. (2022). Opening Tallinn Up To The Sea. Väljaandja.

Marcou, B. (2021). Hotel Ciganlija: frames of impermanence in Belgrade's periphery.

Recreatie, S. (1980). Recreatie op en om het water: twee inventarisaties.

Ruudi, I. (n.d.). Tallinn urban visions of the transition era – from socialist trauma to neoliberalist mirage. Tallinn: Estonian Academy of Arts.

Smit, J., & Van Der Voet, J. L. M. (1982). Gebruik en inrichting van watersportgebieden.

Vink, J., Vollaard, P., & De Zwarte, N. (2017). Making urban nature. Nai010 Publishers.

Precedent studies:
Centre of Water and Ice Sports, Restudio, 2015, Olsztyn, Poland.
Casa Malaparte, Adalberto Libera, 1937, Capri, Italy.
Delftse Studenten Roeivereniging Proteus Eretes, 1882, Delft, Netherlands.
Formentera Water Sports Center, Marià Castelló Martínez and Lorena Ruzafa, 2019, La Savina, Spain.
Het Kruithuis, Delft, Netherlands.
Inwatersportcentrum Insails, Made, Netherlands.
Jachthaven Biesbosch, Drimmelen, Netherlands.
Jachthaven Noordschans, Noordschans, Netherlands.
Kalevi Jahtklubi, Ülar Mark, 2023, Tallinn, Estonia.
SIMAC, Effekt, 2019, Svendborg, Denmark.
Water Sports Center Halsskov, Sweco Architects, 2017, Korsør, Denmark.

Drawing references:
Paisajes emergentes by AD Futures.
Taking Measures Across the American Landscape by James Corner.
Timeline of Dresden by Xinyi (Serena).
VDMA Het inheemse bosch, by Delva Landscape, Architecture & Urbanism.

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 studio's topic is 'A matter of (human) scale' and the project location is the entire coastal zone of Tallinn. The master program in which I participate is MSc Architecture, Urbanism and Building Sciences and I am attending the track Architecture.

My graduation project is located within the coastal zone and provides a link to an urban planning vision pursued by the city council of Tallinn. The site is located on the Baltic Sea next to the guest harbor, the arrival station of visitors to the city. The building mass will serve as an attractive image upon arrival of the city, finishing Tallinn's skyline from the sea. Scale is not only related to Architecture and Urbanism, but the term scale is also used within the field of biology and ecology, also applied in this project. Whitin the field of biology and ecology, scale relates to understanding evolutionary and growth processes, ecosystems, different natural phenomena through change of time.

The relation between my graduation project and the Architecture master track relates to being able to respond to different conditions. To practice a water sport, one needs to be able to react and work with different climate conditions. Watersport has everything to do with making optimal use of the (weather) conditions, think of waves, wind, width of the waterway. Within architecture, one should also be able to

react to different conditions. Every location is unique and requires a different plan of action, function, and design.

For my graduation project, I will design a nature-inclusive building functioning as a water sports school, situated in the urban planning context of Tallinn and focusing on appropriate details containing both technical information and information concerning the other facets/themes in my project, such as biodiversity.

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

By integrating a water sports center with a nature park, the project promotes community engagement and wellness, fostering a culture of physical activity and environmental appreciation among diverse social groups. It contributes to urban regeneration, transforming underutilized areas into vibrant spaces thus enhancing the quality of urban life and promoting sustainable city development. The nature-inclusive design emphasizes ecological responsibility, raising awareness about the importance of preserving natural habitats in urban settings and the detailed analysis of climate, flora, and fauna in the project area contributes to environmental science. In the field of architecture, the project could stand as a model for integrating design with environmental sustainability. The facility can serve as an educational resource, offering programs that teach water sports, but also environmental stewardship, and sustainability.