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	**Carolina Estefania Marquez Luna**
Student number	5936918

Studio		
Name / Theme	Circular Water Stories	
Main mentor	Inge Bobbink	Landscape Architecture
Second mentor	Heidi Sohn	Architecture
Argumentation of choice of the studio	I am motivated to participate in the Circular Water Stories graduation lab by the desire to understand the meaning of water for Mexico City, and how it has been shaped through its history. Also, I'm interested in studying how geomorphological changes have affected the natural water processes in the city, leading to water scarcity. I am passionate about investigating how this impacts people and shapes our cultural relationship with water. Therefore, I'm aiming to design a project that contributes with more sustainable and local solutions.	

Graduation project	
Title of the graduation project	**Memories of Tlaloc:** Water as the Cultural Legacy in Xochimilco
Goal	
Location:	Mexico City, Mexico
The posed problem,	Mexico City faces a multidisciplinary set of challenges that hinder sustainable development and quality of life for its inhabitants. The problem is rooted from its history, causing social inequality and bad governance. Centralised large-scale water supply and drainage systems have been implemented to tackle the population's demands; however, the dependence on this type of system overlooked local needs. The effectiveness of this centralised approach is limited due to deficiencies and changing needs, and it does not offer everyone fair access to water. Moreover, this mismanagement has exacerbated water scarcity and contamination, disproportionately affecting vulnerable populations. The lack of

	community awareness and improper urban planning heightens the pressure on essential spots for water processes such as the regulatory basins, which help mitigate urban flooding, threatened by polluted wastewater and irregular settlements. The spatial design challenge is to integrate urban water management through innovative landscape design in a way that public space can be able to solve water-related problems and improve urban livability. Nevertheless, the management of water in this space is not a technical issue exclusively but a task of reintroducing aesthetic values of water back into the urban landscape.
research questions and	How can a regulatory water basin transform into a park landscape to enhance the relationship between people and water in Mexico City?
design assignment in which these result.	To design an adaptive public space that thrives in both dry and wet conditions throughout the seasons, incorporating water treatment and management strategies while promoting inclusivity by embracing social, environmental, and cultural elements, and transforming a neglected area into a well-maintained communal space.

[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.]

Process

Method description

1. Historical Analysis

a. Review articles and reports that discuss history to understand the impact of the arrival of settlements on the hydrological cycle of the basin and how significant events as colonialism shaped relationships between people and water, and social inequalities in Mexico City. Also, I would like to test what can we learn from ancient practices and values.

b. Visits to various museums such as the Museum of Anthropology and History and Anahuacalli Museum. In order to recognise the meaning Mexican cultural landscape and take a position as a designer for future devolpements.

2. Geospatial Analysis

a. Mapping by using GIS tools to understand water distribution, areas of vulnerability, and the relationship between social and spatial qualities.

b. Studies on land-use changes, resource management, and ecosystem services.

3. Social-ecological systems analysis

a. Literature review about resilience, that discusses how communities and ecosystems respond to changes or shocks, including climate change, natural disasters, and social and political conflicts. Also, Assess the role of policies, regulations, and governance structures in managing social-ecological systems.

b. Interviews with experts, to gain insights into challenges and opportunities related to the water system and management.

4. Research on site

a. Field observation and sketching to record actor's behaviours.

b. Photographic documentation of existing conditions of the site.

c. Collection of contextual information by attending historical places.

5. Design explorations

a. Case studies analysis of specific cases where decentralized solutions have been implemented, in comparable urban environments. Such as, the Kolkata wetlands where water is treated through a natural process.

b. Apply design thinking approaches towards resilience that consider adaptation to changing conditions, such as drought and rain seasons to determine aspects as public accessibility through time.

Literature and general practical references

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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.

Landscape architecture is a discipline that looks at and can has tools to deal with intertwined processes of nature and its connection to changing societies. It recognises that any intervention must be approached with a deep understanding of these complex relationships.
In the context of this thesis, I identify that a collective understanding of the role of water-related to the landscape. For the Mexica, the original inhabitants, water was regarded as a sacred entity, valued for its life-giving properties but also recognised for its potential for violence. Today, the perception of water has become an ambivalent problematic; it is seen as stress factor either for its absence or as a dangerous accumulation.
While landscape architecture provides a foundational framework for territorial management, other approaches can also help repair our relationship with water. Elizabeth Meyer argues that interaction with designed landscapes can become an active practice that embraces observation, exploration, and reflection on our surroundings, fostering a sense of responsibility.

Thus, landscape architecture can become a powerful tool for learning and internalising values related to our natural processes (2008).
Ultimately, this thesis argues that the human experience of decentralised designed landscapes can inform these processes and inspire meaningful actions to preserve water assets by repairing our connection with water.