

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	Thomas Bax
Student number	5722217

Studio		
Name / Theme	Public Building Graduation Studio 2023-24 The Vertical Campus A Public Hub of the Future in The Hague	
Main mentor	Dr. Ir. S. Corbo	Architectural Design
Second mentor	Ir. H.F. Eckardt	Building Technology
Third mentor	Dr. Sang Lee	Theory & Delineation
Argumentation of choice of the studio	My lifelong fascination with towering structures and a deep passion for architecture have led me to a remarkable opportunity—the creation of a Vertical Campus. As urbanization accelerates and available land diminishes, the need for vertical educational spaces has become increasingly evident. This shift from sprawling horizontal campuses to vertical structure presents a host of unexplored challenges and opportunities. The Public Building Studio ethos aligns seamlessly with the importance of "publicness" in contemporary architecture. The focus on creating public spaces that encourage community interaction, inclusivity, and sustainability mirrors the growing emphasis on designing urban environments that are not only functional but also serve as hubs of cultural expression and civic engagement, resonating with the evolving dynamics and values of modern society.	

Graduation project	
Title of the graduation project	The Vertical Town Square
Goal	
Location:	The Hague, The Netherlands (Central Station District)

<p>The posed problem,</p>	<p>Educational institutions, historically spread across large horizontal campuses, are now adapting to the rising trend of vertical towers. This shift challenges the traditional design ethos of universities, known for fostering face-to-face interaction and sparking interdisciplinary ideas. This raises questions about how layout affects learning, interaction, and creativity. The evolution of university campuses reflects changing societal and architectural norms, transitioning from city-centered academic buildings to isolated pastoral campuses and now, re-integrating into urban life with vertical campuses. This vertical integration, however, presents challenges like loss of urban identity and disconnect from street life. The concept of verticality raises questions about accessibility, public access, and the architectural embodiment of education as a public good, aiming for a synergistic relationship between the educational environment and the urban landscape.</p>
<p>research questions and</p>	<p>RQ: How does the design of a vertical campus contribute to the creation and integration of a more symbiotic relationship between the campus and the city?"</p> <p>SQ1: How does the design and layout of horizontal university campuses impact social interactions and cultural exchange between students, faculty, and the local community?</p> <p>SQ2: How do vertical (educational) buildings affect the social fabric and sense of community in urban setting?</p> <p>SQ3: How can the vertical campus in The Hague contribute to its integration as an extension of the urban environment?</p>

	SQ4: How can the integration of private spaces in a vertical campus be re-imagined to approach the concept of an entirely public building?
design assignment in which these result.	This assignment explores the possibility of creating a fully public educational building in The Hague that extends the city vertically, examining how such a structure could be integrated into the urban landscape. It questions if a building meant for public education should inherently offer unrestricted public access and how this translates architecturally. The concept of 'seamless' integration is central, aiming for a structure that complements and enhances the city, rather than just existing within it. This approach could transform a vertical campus into a <i>vertical town square</i> , merging academic and public spaces. This concept discusses where such integration can counter urban anonymity and foster lively, inclusive spaces that encourage cultural exchange and community integration in the city.

Process

Method description

This research aims to understand the transformative potential of a vertical campus in The Hague and investigates how it can redefine spatial dynamics to promote a symbiotic relationship between the educational institution and the city.

Literature Review

The research begins by examining the spatial relationship between urban educational institutions and their surrounding cities, guided by key theoretical concepts. Kevin Lynch's 'Image of the City' helps interpret urban structures through ideas like legibility and urban elements. Henri Lefebvre's works 'Production of Space' and 'Right to the City' provide a theoretical framework for studying socio-political dynamics and spatial claims in urban environments. Attention is given to the intermediate or public spaces of the campus, exploring their role in facilitating interactions between students and the city. Inspired by Whyte's insights in 'The Social Life of Small Urban Spaces', the research explores how these communal spaces can facilitate exchanges, create connections, and shape identities.

Contextual Analysis

The research is divided into three main investigations. First, it examines the relationship between campuses and their urban contexts, providing a historical and spatial overview and emphasizing the importance of understanding examples. These could include campuses like Leiden, Erasmus Rotterdam and/or Delft, as they may be stakeholders for the vertical campus.

Second, the study focuses on global vertical case studies to extract insights about the spatial configurations of these vertical campuses and understand how they blur the boundaries between (academic) spaces and the urban environment.

The third investigation concentrates on The Hague and conducts a comprehensive site analysis to examine aspects such as urban development, architecture, socio-economic dynamics, and cultural and demographic factors. This localized contextual analysis is crucial for formulating strategies to integrate the proposed vertical campus into the fabric of the city.

Architectural Exploration

This study explores the architectural and design aspects of implementing a vertical campus in The Hague, drawing from a strong theoretical and contextual foundation. Research-by-design, particularly emphasized in the Public Building studio, is used to address important design challenges, such as reconciling the contrast between public and private spaces in a vertical structure. The study aims to create a cohesive vertical campus that seamlessly integrates into the urban environment, with an emphasis on connectivity, accessibility, and permeability to foster interaction between the educational space and the city below.

Literature and general practical references

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Sennett, R. (2013). *Together: The Rituals, Pleasures and Politics of Co-operation*. Penguin Books Ltd (UK)

Strange, C.C.; Banning, J.H.; Delworth, U. (2001). *Educating by Design: Creating Campus Learning Environments That Work*. Jossey-Bass.

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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.

Reflecting on the connection between my graduate project and the master's program, it is clear that my focus on vertical campus design ties in with the broader themes of urban evolution and architectural innovation. Rooted in the history of vertical expansion in cities like Manhattan and influenced by visionaries like Le Corbusier and Archigram, the vertical campus brief seeks to reshape educational institutions within this vertical paradigm. This approach not only resonates with 1960s avant-garde ideas but also addresses current urban challenges, making it highly relevant to the architectural discipline in my master's track.

My graduation work has important applications in the social, professional, and scientific domains that go beyond academia. The essential requirement for space optimization in rapidly increasing cities is addressed in the context of urban planning and architecture. By offering strategies for the effective utilization of vertical spaces in densely populated regions, my concept adds to the continuing discussion about sustainable urban development.

The impact of my research is significant, especially as our cities keep growing upwards. A vertical campus isn't just a futuristic idea; it's becoming a practical solution. Traditional university campuses often feel separate from the city around them, but a vertical campus can bridge that gap. By embedding educational spaces within the city, we can make education more inclusive and accessible. This approach ensures that education stays a public good, both physically present and symbolically connected to the urban environment.

Professionally, this project marks a significant change in architectural thought, urging architects and urban planners to design educational spaces that are adaptable, multifunctional, and well-integrated into urban environments. It challenges professionals to reconsider the relationship between buildings and their surroundings, especially with an eye toward fostering lively, inclusive urban communities.

The research expands the notion of how architecture and urbanism influence social interactions and community development from a scientific point of view. It offers new insights into the interplay between social dynamics and spatial volumes, especially in vertical buildings. By integrating social science, urban planning and architectural design, the vertical campus underlines the importance of research-by-design in architecture, aiming to create spaces that are not only visually pleasing but also socially and ecologically responsible.