

# 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](mailto: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	Majd Shahoud
Student number	5153301

Studio		
Name / Theme	Public Building/ The Vertical Campus	
Main mentor	Henk Bultstra	Project Design
Second mentor	Ger Warries	Technical Building Design
Third mentor	Sien van Dam	Theory and Delineation
Argumentation of choice of the studio	<p>Designing a public building or a building with public spaces has always been my fascination and that is why I always knew that this is what I want to do in the future.</p> <p>In addition, my favourite part of designing public buildings is their social aspect and how to bring people together and create interaction between them.</p> <p>I am interested in the challenge that the studio requires of designing a public building and keeping the aspects of multifunctionality, multiplicity and hybridity in mind. Although a campus has a public function, it is still challenging to make it accessible to everyone. Especially when the functions are vertically stacked, it is harder to invite people to go to the higher public areas.</p>	

Graduation project	
Title of the graduation project	Designing inclusivity: Eliminating social barriers, increasing collective identity
Goal	
Location:	The Hague Central Station area
The posed problem,	[Problem Statement]
research questions and	[Research Question]
design assignment in which these results.	[Design Assignment]
<p>Situated in The Hague's Central Innovation District, the goal is to design a mixed-use vertical campus that promotes connections, inclusivity, and a strong sense of belonging among users. Through the integration of design features that stimulate</p>	

social engagement, accessibility, and shared spaces, this project seeks to transform the site into a vibrant and welcoming focal point and destination that uplifts the entire urban area.

Also, it is vital to have shared spaces and facilities among diverse parts of the building, envisioning a more efficient and collaborative use which will facilitate a diverse range of uses within a constrained space.

This graduation project aims to address the challenges faced by the area around the Hague Central Station, which has become dominated by non-places, lacking a sense of belonging and community cohesion.

The Hague's Central Station, dominates the use, circulation, and experience of the site, not only because it is the arrival point for some visitors, but also because of its central location. This determines that the experience for most users on the site stays as transitional and not as 'destinational'. This is because people use the station as a transition to reach their destination and because there are not enough quality public spaces in the area that attract people to stay there. Also, the fact that the site is dominated by the train station and other inaccessible buildings makes almost every other building not well accessible which is also the case at Leiden University, even though it is a public building. In addition, the biggest part of the building of Leiden University is allocated to student housing which resulted in a lack of facilities and communal and shared spaces for and among these students.

Although this site is one of the most important locations in the city, if not the most important one, quality public space is missing. This is because of the huge administrative buildings, which are mainly used for governmental offices. These buildings might be seen as 'places' for their users, but they are non-places for the visitors and other users of the site. Also, the privacy these buildings require results in closed-off fortresses inside the city fabric. These urban and architectural problems turned this site into an inaccessible and unpleasant place to stay and made it a transitional stop rather than a destination. This is why people do not have a sense of belonging in the site or its buildings which is a fundamental aspect in the public realm.

Therefore, the Main Research Question is:

- How can the design of a vertically configured campus in The Hague's high-density city fabric promote a sense of belonging, social cohesion, and human well-being, transforming it from a non-place into a vibrant, inclusive destination?

The Sub-questions are:

- What architectural and urban design elements can be incorporated to enhance accessibility, transparency, and the elimination of physical and social barriers within the educational building?

- How can the design of the building encourage social interactions, gatherings, and shared activities to foster a collective identity and a sense of belonging among its users?

- What strategies can be implemented to improve wayfinding and navigation within the building, stimulating interaction and creating social cohesion, and how can shared spaces and facilities promote efficient and collaborative use among different parts of the building?

With this, the design assignment aims to create a mixed-use vertical hub in the Hague's central station area that fosters connections and inclusion by providing a variety of qualities and facilitating a diverse range of uses within a constrained space. In this way, many people will feel welcomed in the building and be part of it. By integrating these varieties, the goal is to create an accessible place for everyone including less-abled and vulnerable people in society and eliminate social barriers. In the end, this campus must become a destination that attracts people to the site and provides quality public space where communities can grow.

## **Process**

### **Method description**

The research and design process will employ a combination of research methodologies and techniques, including:

1. Literature Review: Conduct an extensive literature review related to the vertical campus, sustainable design, hybridity and multiplicity. (Throughout the whole year)
2. Research by Design: The studio uses a specific method known as Research-by-Design. Research-by-Design focuses on design work as a special form of research. It considers theory and praxis, analysis, and imagination as inseparable and as a medium to help conceive and develop architectural ideation. Research is not only about preparation, description, and explanation but also more importantly about projection and speculation. Research is therefore a form of design and design is a form of research. Conceptualize innovative campus designs that integrate with urban centres and reflect the concept of a vertical campus which is the research method of the studio. (Throughout the whole year)
3. Historical Research: Collect historical research through site visits such as Oxford and London in the UK to study the evolution of university campuses. (Done in P1)
4. Surveys and Interviews: Collect data through surveys and interviews with stakeholders such as the municipality, students, employees in Leiden

University and NS and other stakeholders, to gain insights into evolving educational and urban needs. (Done in P1)

5. Analysis of Existing Vertical Campuses: Analyse existing Vertical Campuses and similar projects worldwide to identify best practices. (P1&P2 and P3&P4 if needed)
6. Workshops: Participate in workshops and discover new design tools, coding, and scripting for research and architectural design. (Throughout the whole year provided by the studio)
7. Technical Building Design: Collaborate with Technical Building Design instructors to apply circular design principles and sustainable construction techniques. (P2, P3, P4 & P5)
8. Environmental Impact Assessment: Evaluate the environmental impact of proposed designs, focusing on energy efficiency and CO2 emissions. (P2, P3, P4 & P5)

### **Literature and general practical references**

- a+t research group: Aurora Fernández Per y Javier Mozas. 50 Hybrid Buildings: Catalogue on the art of mixing uses. Vitoria-Gasteiz: a+t research group, 2020.

- a+t research group (Aurora Fernández Per, Javier Mozas, Javier Arpa). This Is Hybrid: An analysis of mixed-use buildings. Vitoria-Gasteiz: a+t research group, 2011.

- Ford, Alan. Designing The Sustainable School. Images Publishing Group Pty Ltd, 2007.

- Gaines, Thomas A. The Campus as a Work of Art. New York : Praeger, 1991.

- Dober, Richard P. Campus Planning. Reinhold, 1963.

- Powell, Robert. Rethinking the Skyscraper: The Complete Architecture of Ken Yeang. WatsonGuptill, 1999.

- Augé, Marc. Non-places: An Introduction to Supermodernity. London: Verso 2009.

- Augé, Marc. Non-places: introduction to an anthropology of supermodernity. London: Verso 1992.

## 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 Public Building studio investigates the future of public buildings and their role in the built environment, by developing new spatial formulas, programmatic articulations, and building components. The work of the Public Building studio involves reinventing past structures and questioning existing typologies through research and design as well as research by design. The Graduation Studio aims to produce future-proof designs that are sustainable and investigates the possibilities of design thinking in a world where the definition of what an architect is and does, ceaselessly shifts. Public architecture should respond to and accommodate today's needs while anticipating the future. That is why my graduation topic responds to the problems that The Hague's Central Station Area is facing such as lacking of quality public spaces, inaccessibility and disengagement of people with the site. By providing these qualities the site will be transformed into an inclusive public hub.

During the first phase of this graduation project, an urban concept was made for the site around the Hague's Central Station which is further developed during P2. Further, the main focus during P2, P3 and P4 is the architectural design of a vertical campus through the method of research by design. Also, the project will be refined by paying attention to building technology and sustainability aspects.

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

Within the Architecture master track, the project deals with the technical, spatial, and social challenges inherent in designing educational and public built environments. The project holds relevance within a broader professional and scientific framework, exploring a research topic that intersects various knowledge domains and requires collaboration across different research areas such as pedagogy, technology, and architecture. On site in The Hague, there exists a significant amount of knowledge, for example in the buildings of the municipality, or a large number of educational institutions present on site. However, this knowledge is not accessible to the general public. Situated in The Hague's Central Innovation District, the goal is to design a mixed-use vertical campus that promotes connections, inclusivity, and a strong sense of belonging among users. Through the integration of design features that stimulate social engagement, accessibility, and shared spaces, this project seeks to transform the site into a vibrant and welcoming focal point and destination that uplifts the entire urban area. The research and design topic I chose is socially driven. It aims to create social cohesion and an inclusive environment where as many people as possible can belong and contribute. In addition, this is a topic that should get more attention during the design of any public building.

## **Planning**

Following the presentation of the master plan, the focus shifted towards designing a campus in that master plan. Based on the required program, a schematic design is made for p2 floor plans, and cross-sections at a scale of 1:500 and 3d views.

After P2 the design progressed from a schematic design towards a more developed design.

Post P3, the design got to a more detailed stage. The situational drawing, floor plans, sections, and facades were expanded to a 1:100 scale. Additionally, a segment of the building was intricately developed at a 1:50 scale, accompanied by a facade fragment featuring corresponding details to clarify the structural connections within the building. In this phase of the project, the focus is on the technical building design which is integrated into the design and drawings.

By P4, 21 May 2024, the mentioned components are fully realized, and certain aspects will undergo further fine-tuning until the project's completion at P5. Also, the graduation report is completely done by P4. Any further improvements or additional materials that are required after P4, they will be done before the final assessment by P5 which is on 27 June 2024.