Graduation project	
Title of the graduation project	Multiverse Hub: Crafting Paths for a diverse Co-existing
Goal	
Location	The central square of The Hague Central Station (on the northern-west side)
The posed problem	Rather than concentrating on the development of a single city, the Dutch government decided to focus on clustering connections among various sites in the Randstad network. Accommodate the anticipated influx of the growing population in the future from this network poses potential challenges and pressures for The Hague. When we look at the area around the central station, people utilise the infrastructural network for work and study. However, through the process of moving from one space to another, some requirements for the users' journey fail to be fulfilled. People occupy spaces without being fully present. This discontinuous space-use results in dissatisfaction in living quality. Advancements in digital technology do not discourage students from using on-campus spaces due to specific aspects that remain irreplaceable through virtual presence. Instead, compared to traditional use, the required functions of campus spaces have become more complex and changeable. Students require varied spaces, such as for working alone or within a group, on or off the campus, to work on a more efficient schedule. Campus design should fully support this flexible working style. Furthermore, the current approach of constructing more buildings to cope with the rising population has environmental impacts and is not a sustainable solution.

research questions	A. How can the design enhance the usage rate of the spaces around the Hague Central station to minimise the impact of the influx on the city by accommodating more people? B. In what ways can the design contribute to the enhancement of learning-efficiency and living quality for users? C. How can the design exemplify inward densification for the rising population, promoting sustainability by ensuring efficient space utilisation?
design assignment in which these result.	***Objective 1 (Contextual)*** Create an accessible campus close to the network, ensuring a short distance from the Hague Central station, and providing various programs efficiently. By shortening the movements from the station to the campus, the overall required space is minimised to decrease the impact of influx on the city. ***Objective 2 (Quantitative)*** Implement compact use in programmatic space featuring inward densification: emphasising more efficient utilisation of available spaces, focusing on the valid useful volume of spaces and the occupancy rate of these spaces. ***Objective 3 (Qualitative)*** Establish a multifunctional campus equipped with a variety of spaces and facilities to fulfil various needs on the daily paths of users, promoting more learning efficiency and a better quality.

Process

Method description

I. Design Concept and research on design Parameters

The design treats users' paths as central elements in achieving the intended objectives, aiming to seamless integrate these paths into the building structure. The overarching concept involves folding user paths within the building.

1. Contextual Parameters

Determination of the user paths is based on gathering flows from the Central Station. Pedestrian movement patterns around the site will be analysed, and connections to the building will be established. The mass and void of the structure will be shaped by an analysis of the urban contexts.

2. Quantitative parameters

Quantitative requirements for activities on user paths, such as user numbers, area per person, usage hours, occupancy rate, space dimensions, are studied and determined through data collection and stakeholder interviews. Programmatic strategies are developed, overlapping activities based on functions, user groups, and time. A comprehensive program list that incorporates overlapping activities will be established.

3. Qualitative parameters

Qualitative data influencing users' emotions and experiences, such as shapes, walking distances, sight lines, daylight preferences, privacy levels, and noise tolerance, is set. and strategies for each parameter are developed.

II. Design of Building Masses

The building masses will be determined by the urban contexts and the desired relationship of the three user groups defined from the last step.

III. Programmatic placement

Programs will be positioned within the building masses based on the researched quantitative and qualitative parameter along the user paths.

IV. Integration and Materialisation

This step involves the development of architectural strategies for space planning in the building's configuration. The aim is to meet functional qualities, such as structure, proper circulation patterns, climate schemes, facade detailing, and material use.

Schedule
P2 :Programming and Schematic Design phase P3+P4: Design Development phase

Literature and general practical references

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Reflection

Integration with the network infrastructure

The project integrates with the surrounding infrastructures, offering convenient access not only for users from the Randsted network but also for those from the nearby Leiden campus and offices. This inclusive approach provides quick and direct pathways for the main users from the Randsted network, reducing the overall footprint of activities in the city. Moreover, by addressing missing functions within the surroundings, the project aims to enhance community engagement.

Collective spaces enables Hybridity

The collective zone of the design connects the vertical campus continuously through horizontal and vertical circulations, enabling accessibility and views to different activities across levels. In addition, it provides the required outdoor space and facilitates work through out the day. It allows for two kinds of accessibility, direct and indirect, allowing the main users of the spaces to maintain a sense of priority.

Several spaces, notably lecture halls, model halls, and exhibition areas, which are both public and versatile in their usage and do not rely heavily on daylight, are transitioned to the collective zones from each primary user's buildings. This enables more utilisation at different times and enhances the overall space efficiency, emphasising sustainability.

Positive qualities of Hybridity includes fulfilling the requirements of each space. This is achieved by establishing two distinct identities between the main zone (campus, office, and youth centre) and the collective zone. Different material usage, structural systems, indoor/outdoor spaces, proportions of spaces, and lighting conditions are manipulated to create these different identities. Additionally, this enhances wayfinding in the vertical campus.

Another positive qualities of Hybridity is the proper transition between these two zones. Active threshold elements, such as access control by identity card with door gates, and passive ones, such as changes in floor materials, structural systems, or width and lengths of routes/ pathways, are arranged. These elements result in different senses of transition when approaching the collective spaces from different sides, achieving the required varied levels of privacy and priorities.

In summery, the Hub blends efficiency and community in its integration, crafting pathways for diverse co-existence and Hybridity.