

# 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	Arno Decorte
Student number	5703491

Studio		
Name / Theme	AR3AD110 - Designing for Health & Care	
Main mentor	Birgit Jurgenhake	Architecture
Second mentor	Lex van Deudekom	Building Technology
Third mentor	Kobe Macco	Research
Argumentation of choice of the studio	The theme of the studio aligns with my personal philosophy regarding human centered design. I am looking forward to fulfilling my ambition of designing in accordance with this philosophy with the development of a project that contributes positively to the ways in which architecture can promote the well-being of the people it serves.	

Graduation project	
Title of the graduation project	Better Together – A Socially Connected Independent Living Environment for The Elderly
Goal	
Location:	Delft, Netherlands
The posed problem,	This research proposal delves into the concept of social connection and its pivotal role in the well-being of the elderly population, particularly those aging alone. Social connection is an intrinsic human need, encompassing intimate, relational, and collective aspects. Neglecting this aspect in contemporary healthcare contributes to social isolation, which can lead to numerous adverse effects on health, including increased disease risks and reduced overall

	<p>quality of life. Recognizing social connection as a catalyst for well-being, the research highlights the importance of architecture in promoting it within elderly living environments.</p> <p>The prevalence of social isolation is evident, with a significant portion of elderly individuals experiencing loneliness, especially among those living alone, who constitute the largest population in the Netherlands. This trend is expected to persist as the elderly population grows, posing greater challenges and exacerbating issues such as the generational gap, mental health concerns, and overall diminished quality of life.</p> <p>While "ageing in place" is a preferred option for many elderly individuals, it may pose risks if not supported by a strong community. The Dutch healthcare system's shift towards home-based care has reduced the availability of alternative options. The elimination of retirement homes in favor of nursing homes has limited choices for healthy elderly individuals, forcing them to either move in with family, continue living alone, or wait until their health deteriorates to access nursing home care. The research proposal addresses the need for elderly housing that promotes independent living, fosters social connection, and enhances overall well-being within a community environment.</p>
<p>research questions and</p>	<p><b>Main Question:</b></p> <p><i>How can the architectural design of elderly independent living facilities enhance well-being by promoting social connections amongst the elderly?</i></p> <p><b>Sub Questions:</b></p> <ol style="list-style-type: none"> <li>1. What housing options exist today for the elderly?</li> </ol>

	<ol style="list-style-type: none"> <li>2. What are the preferences and needs of elderly residents regarding social interaction and connectivity?</li> <li>3. How can a socially connected environment promote a healthy and independent lifestyle for the elderly?</li> <li>4. What kind of connections can be made with a city to further promote social connection and well-being?</li> </ol>
--	---

<p>design assignment in which these result.</p>	<p>Develop an innovative and sustainable independent living facility in Delft, Netherlands, tailored to meet the unique needs of elderly residents who wish to age independently while fostering social connections and a sense of community. The design should prioritize well-being, convenience and social connection, creating a supportive environment that enhances the quality of life for the aging population while relieving the pressure on the healthcare system. This assignment seeks to address the current gap in housing options and promote the principles of healthy living environments for the elderly.</p>
---	--

[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**

This research employs a dynamic approach that combines top-down and bottom-up methods to develop versatile design principles for socially connected independent living facilities. The top-down aspect draws insights from extensive secondary research, including case studies and literature, to establish archetypal principles. Simultaneously, the bottom-up facet involves primary research through fieldwork and interviews with the intended users to ensure the principles are adaptable to unique user needs and contextual factors. This holistic methodology aims to create a blueprint for architects to effectively promote social connection in elderly living environments across the Netherlands, addressing the challenges posed by an aging population.

**Literature and general practical references**

This research draws ideas from a few key pieces of literature:

**Elderly Wants & Needs:** The documents created by Platform 31 titles 'woonprofielen' and 'woonvarianten' provides a comprehensive overview of elderly housing demand and the related housing typologies. It serves as a foundation for framing the work done in the fieldwork.

**Social Connection:** 'Social support and the physical environment' by Raymond Fleming et al. is a starting piece of literature that has been chosen for application in the research report's analysis of social connection due to its prior applications in architecture through Jantine Bouma and Tawfiq Abu-Gazze's work.

**Architectural Design:** 'Architecture for Health' by Battisto and Wilhelm (2019) emphasizes the importance of regenerative design, seeking to balance prevention and treatment in the built environment for overall health promotion. It is used to provide a contemporary understanding of the relationship between architecture and health and is cited throughout the paper.

**Well-Being on the Urban Scale:** 'Introducing the "15-Minute City": Sustainability, Resilience and Place Identity in Future Post-Pandemic Cities' by Carlos Moreno provides a theory that was used for framing the surrounding context when building elderly living environments. It was paired with fieldwork results to further narrow it down to be applicable to elderly residents.

These are key theories from literature that inform the research, guiding both its theoretical underpinning and practical methodology.

## **Reflection**

This research project presents a unique opportunity within the field of Architecture. It addresses the pressing issue of an aging population and the need for architectural solutions that foster well-being and social connection among the elderly. While environmental challenges dominate architectural research, the urgency of addressing societal issues should be equally compelling. This project acknowledges the power of architecture to shape lives and emphasizes the responsibility to act promptly. It is highly relevant to the Architecture track and is a viable choice for my Master's graduation project, offering the potential to enhance the quality of life for all generations.