

# 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	Rachelle de Geus
Student number	5248736

Studio		
Name / Theme	Designing for care – towards an inclusive living environment	
Main mentor	Leo Oorschot	Architecture
Second mentor	Maria Meizoso Aguilar	Building Technology
Third mentor	Birgit Jürgehake	Research
Argumentation of choice of the studio	Looking back at the past years, I have often found myself designing for people in need or health-related topics. As my final design project, I want to use this opportunity to yet again design for a health-related topic and hopefully create design principles and a design that contributes to better health and well-being. This time I specifically want to research and design for women who are pregnant and/or have given birth, since I have been inspired by my two sisters who have been pregnant and/or gave birth this year for the first time.	

Graduation project	
Title of the graduation project	Architecture & Childbirth: The positive influence of architecture on women during labor, delivery, recovery and postpartum
Goal	
Location:	Delft
The posed problem,	Research has shown that under the influence of negative experiences, childbirth can be harmful and have negative effects on the women's (mental) health, such as stress and anxiety which can lead to prolonged labor, impaired mother-child attachment, and even postpartum depression which is the most common condition among new mothers. One of the factors that profoundly affects women's experience of childbirth is the physical environment. Unfortunately, a problem that seems to occur is that contemporary maternal healthcare facilities are designed from a highly-regulated and medicalized maternity care perspective, instead of a woman-centered

	<p>design approach. Research has shown that 79% of the women in The Netherlands who need maternal healthcare, come in contact with these highly-regulated and medicalized facilities. Most current facilities provide little interior-related improvements at most and lack health-improving and nature-inspired design approaches.</p>
<p>research questions and</p>	<p>What kind of architectural environment could contribute to a positive experience, improving health &amp; well-being, for women during the stage of LDRP* in a maternal healthcare facility?  <i>*labor, delivery, recovery, and postpartum</i></p> <ol style="list-style-type: none"> <li>1. What are the (environmental) needs of women during the stage of LDRP in a maternal healthcare facility?</li> <li>2. What kind of nature-inspired design principles could improve women's health &amp; well-being in a maternal healthcare facility?</li> <li>3. How do women during the stage of LDRP perceive their (architectural) environment in contemporary maternal healthcare facilities?</li> <li>4. How are the (architectural) environmental needs of women during the stage of LDRP currently visible in the maternal healthcare facilities?</li> </ol>
<p>design assignment in which these result.</p>	<p>The goal is to form architectural design principles and/or a design that contributes to a positive experience and an improvement in health &amp; well-being for women in a maternal healthcare facility. I hope to tackle the problem of highly regulated and medicalized maternity care settings and to stimulate a more home-like and healing birth environment whilst being in a healthcare facility.</p>
<p><b>Process</b></p>	
<p><b>Method description</b></p> <p>To answer the main- and sub-questions, various types of research methods will be carried out in this research. One of the research methods that will be used includes literature study, based on the theoretical framework of research about hospital design, birth environment and -experience, and biophilic design. Furthermore, women's experiences in maternal healthcare facilities will be researched through semi-structured interviews and observations. With the outcomes of the literature study and fieldwork, case studies of maternal healthcare facilities or other health-related facilities will be researched.</p>	

## Literature and general practical references

The literature study will provide the necessary background to my research and will involve researching, reading, analyzing, and evaluating different types of scholarly literature such as books and articles. Literature that will be used will be concerning the topic of hospital design, birth environment and -experience, and patient-centered care. In addition to that will literature study be done concerning the topic of biophilic design. Both topics are based on my theoretical framework. In addition to this, the literature study will be strengthened by other literature or with additional facts and figures provided by official records and resources.

## 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 master thesis focusses on a target group (women during the stage of LDRP) and the influence of architecture on them. This combination of research will form architectural design principles which could contribute to a positive experience and an improvement in health & wellbeing for women in a maternal healthcare facility.

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

Research has shown that within the female population, which currently is 50,3% of the entire population in the Netherlands (8,84 million women), 17% of the women remain childless. This concludes that most women come in contact with the experience of childbirth at some point in their lives and its corresponding maternal healthcare facilities. Since these facilities are often highly regulated and medicalized, is it important to review maternal healthcare facilities and tackle the problem of having negative influences on women's (mental) health. On a larger scale could the design principles that arise from this research be beneficial for other healthcare facilities as well, like hospital settings. It could teach us, designers and future architects, to design from a more patient-centered design approach, improving health and well-being.