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	Antoine (Twan) Goossens
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Telephone number	
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Studio	
Name / Theme	Complex Projects
Teachers / tutors	Hrvoje Smidihen
Argumentation of choice of the studio	The combination of research into trends that shape the future and the design of large projects that react on those trends is interesting and relevant to the way we work and think about society today.

Graduation project	
Title of the graduation project	Urban recycling infrastructure in 2100 Amsterdam
Goal	
Location:	Amsterdam Overhoeks (Centraal)
The posed problem,	The introduction of a circular economy and continued population growth in Amsterdam are competing for scarce available space, whilst automation makes new innovations possible.
research questions and	How will waste treatment be incorporated in the urban fabric of the city centre of Amsterdam in 2100?
design assignment in which these result.	Design an automated waste collection facility in the city centre of Amsterdam that fits into a circular economy, makes efficient use of available space and creates/preserves scarce public space.
Process	
Method description	

Research will be conducted through a literature study, interviews with professionals, case studies of existing projects and systems. This will all be used to create a scenario for 2100. Historical analysis, identification of current trends and extrapolation to the future is used to develop this scenario. The design is made specifically for this scenario, and is thus used to show one possible answer to the research question.

Literature and general practical preference

Complex Projects Studio, *Syllabus Complex Projects* (Delft: faculty of Architecture TU Delft, 2017)

This graduation project is situated within the Complex Projects Studio, relating it to the practice of Kees Kaan and the AMS institute, as well as a significant amount of previous student work and studies into future scenarios and large urban projects. Further relevant literature that forms the basis of the design and research process includes, but is not limited to:

Literature on research methods:
Ray Lucas, *Research Methods for Architecture* (London: Laurence King Publishing Ltd, 2016), 6-23
Linda N. Groat & David Wang, *Architectural Research Methods* (Hoboken, New Jersey: John Wiley & Sons, 2013)
Alex Wilkie, Martin Savransky & Marsha Rosengarten, *Speculative Research* (Abingdon, United Kingdom: Routledge, 2017)
Anthony Dunne & Fiona Raby, *Speculative everything: design, fiction and social dreaming* (Cambridge, Massachusetts: MIT Press, 2013)

Literature on the practice of architecture:
Rory Hyde, *Future Practice: Conversations from the edge of Architecture* (Abingdon, United Kingdom: Routledge, 2012)
Nishat Awan, Tatjana Schneier & Jeremy Till, *Spatial agency: other ways of doing architecture* (Abingdon, United Kingdom: Routledge, 2011)
Jencks, C. & Kropf, K. (1997). *Theories and manifestoes of contemporary architecture.*

Literature related to automation and circularity:
Gemeente Amsterdam & AEB, *Afvalketen in beeld: grondstoffen uit Amsterdam.* (2015)
Andrew J. Writt, *A Machine Epistemology in Architecture* (Journal for Architectural Knowledge No. 3, 2010)
Muriel Combes, *Gilbert Simondon and the Philosophy of the Transindividual* (Cambridge, Massachusetts: Massachusetts Institute of Technology, 2013. Translated version of Individu et collectivité, G. Simondon, 1999)
Gemeente Amsterdam, Circle Economy, Fabric & TNO (2016). *Circular Amsterdam.* Downloaded from https://www.circle-economy.com/wp-content/uploads/2016/04/Circular-Amsterdam-EN-small-210316.pdf

Rijksinstituut voor Volksgezondheid en Milieu (2016). *Exploration of Circular Economy in the construction sector: A perspective for the market and government.* Downloaded from https://www.rivm.nl/bibliotheek/rapporten/2016-0024.pdf

Reflection

Relevance

Even though it is clear that on the long term only a (nearly) circular economy can function, at the moment we do not really understand how this would change our everyday life in the city, and the city fabric as a whole. In the current state of economical, technological and societal transition it is very relevant to look at the past, the present and the future, distinguish trends, and think of how the future could develop. By doing so we can add to the discussion on where we are today, where we want to go, and what we should do to get there. Furthermore, it becomes possible to take into account expected future challenges and changes in projects that are conceived of today, greatly increasing the durability and livability of our buildings and cities.

Time planning

April 8th-17th: **P3** presentations
Programmatic and functional aspects need to be developed in detail. Spatial and material qualities as well as facade concepts need to be presentable. The designs need to fit into the larger urban strategy and narrative, which is initially created through group work.
May 16th-28th: **P4** presentations
Full presentation of past work, narrative, research and design process, as well as final drawing set and set of study models. Explanations ranging from analysis, problem definition, urban design, building in context, building concept, materialization, all the way to critical detail. Technical and structural solutions and details are present.
June 24th to July 12th: **P5** presentations
All products are finalised according to the Complex Projects templates. Most effort in this phase is put into a 70x70cm presentation model.

No minors, additional exams or other courses are planned or required outside of the normal graduation track. Possibly, the P4 and P5 dates are shifted one semester (discussed with tutor).