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:

<table>
<thead>
<tr>
<th><strong>Personal information</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
</tr>
<tr>
<td><strong>Student number</strong></td>
</tr>
<tr>
<td><strong>Telephone number</strong></td>
</tr>
<tr>
<td><strong>Private e-mail address</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Studio</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name / Theme</strong></td>
</tr>
<tr>
<td><strong>Teachers / tutors</strong></td>
</tr>
<tr>
<td><strong>Argumentation of choice of the studio</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Graduation project</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title of the graduation project</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Goal</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location:</strong></td>
</tr>
<tr>
<td><strong>The posed problem,</strong></td>
</tr>
</tbody>
</table>
rid of the car in the Sloterdijk area to save this space to better facilities for the people. Therefore, the next problem will be; how and where to place the cars coming into the city? Therefore, a mobility hub should store the cars and provides alternative (yet sustainable) transportation for the society. The hub makes it possible to be a great catalyst for that area.

**research questions and Main question:**

“What will be the design for the transit hub of Sloterdijk Centrum to improve the living quality based on open data analysis and future mobility?

**Sub-questions:**
- Besides storing the cars, what are the secondary functions of the hub?
- How much does/should the design of the central hub benefits from the researched open data?
- What will be the transition time between 2018 – 2050?
- How should the building be prepared for a different context?

**design assignment in which these result.**

The design of a central mobility hub for the Sloterdijk area to make accommodation of the increasing amount of new residents possible. The building should be functioned over the coming 20-30 years respectively and should be able to adapt major changes of different functions over time.

**During P1:**
- My graduation partner (Gabriel Garcia, GEO) and I will determine our research question and have talked with several stakeholders. The project initiators; the municipality of Amsterdam, The project innovators; UNStudio, The project contributors; RADD (automated vehicle experts in Delft).

- We have attended as much as talks and lectures possible in what we want to achieve during our graduation thesis. From here our Research question is formulated. We also decided to work together during P1 and P2, where Geomatics is able to help during the research project of getting all the data possible.
From here, extensive research of data is necessary. This will be done in phases of the process of the central hub, during P2 respectively.

**P2:**
- First, I will determine the location of the central hub, where the location is based on data of traveling and travel modes to find the most efficient location possible. This will be done by Data collection, talks with stakeholders, theories about ideal ways of traveling, based on earlier researches. This will be done by an MCA (Multi-Criteria-Analysis) approach and Research by Design method.
- Second, what does it need to facilitate? Here, I need to do research what the hub should function on primary and secondary base. Secondary could be residential or mixed-use function in order to accommodate much as people possible.
- Third, when the location and facilities are clear, Research is needed in how the hub should ‘behave’ over time until 2050. (If the focus is mainly Automated vehicles, the hub should be prepared for this technique) Here I will do research on current living conditions, and I will have several talks with main stakeholders. Because doing research of data in the future is impossible. The information from companies, theories as well as interviews become highly essential for me.
- Fourth, when all the facets have been determined, the final design of the building needs to be determined. Here, the design will be decided mainly thanks to collected data results. However, the final design for the P3 will focus here on the execution of the hub and its actual design.

**P3:**
- According to the graduation manual, as well as my P2 process I will further determine the building design towards final execution. To continue, the cooperation between Geomatics (Gabriel) and me will end and we will work mainly mutual between the faculties to stay in connection and to keep our works vital for feedback.

**P4:**
- In here I will work towards the final design of the Hub, project HUMAM hopes to have a connection to many people and stakeholder companies towards final presentation.

### Process

<table>
<thead>
<tr>
<th>Method description</th>
</tr>
</thead>
<tbody>
<tr>
<td>- [see also ‘design assessment in which these result’]</td>
</tr>
<tr>
<td>- Working co-operative with Geodesign during P1 and P2</td>
</tr>
<tr>
<td>- Through the analysis of (partly)open data (city analysis, people’s behavior) and future mobility finding out what are the most important aspects to create the hub for Sloterdijk.</td>
</tr>
<tr>
<td>- To discover the conditions of the people and employers in the area, an MCA approach. Here, a scientific evaluation method will be realized, to make</td>
</tr>
</tbody>
</table>
rational choices of travel times. The most efficient results will contribute in the
design phase of this project.
- By using Research by Design method, using models and drawings, the
characteristics of the area shows new potential ways of transformation, as well
as densification and identification for the new hub.

**Literature and general practical preference**

**Primary literature:**
- All documents provided by Municipality Amsterdam
  (such as given data, presentations, vision plan)
- All documents provided by TU Delft and BNA
  (such as maps, presentations, maps, general information)

**Secondary literature such as:**
technology will transform the work of human experts*. Oxford, United
  Kingdom: Oxford University Press.
- All papers provided by Luca Bertolini (about society and mobility)
  such as:
  ~ *Spatial context with car dependency*
  ~ *Urban intensification and transportation planning in the Netherlands*
  ~ *A way out of traffic congestion*
  ~ *Urban streets between Public Space and Mobility*

**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)?**

Project HUMAM is mainly focused on future solution for the city of Amsterdam, which
interconnects with the Cross Domain City of the Future studio. Developing this
project during the Master track at Architecture enables me to execute extensive and
academic research on data and urban scale. From here, I am able to narrow it down
to 1 particular building. I believe this project represents the overall vision of the Cross
Domain City of the Future studio, which shows the MDP-collaboration, involved
stakeholders (such as the BNA) and active, as well as sustainable way of working.
2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

This project mainly wants to achieve social awareness to the stakeholders as well as to the people. A central hub always became an ‘ambitious’ idea, but with the rapid technological developments, this building could be the remedy for Sloterdijk 2020-2050. Project HUMAM will set the focus on data, which is not new, but innovating in the way how it will be conducted; here, big data will decide how the building should behave, which could lead to a total twist in architectural practice. This project will show great benefits that could lead to more larger realization.