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>Personal information</th>
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<tbody>
<tr>
<td>Name</td>
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<td>Student number</td>
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<td>Telephone number</td>
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<td>Private e-mail address</td>
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<th>Studio</th>
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<tr>
<td>Name / Theme</td>
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<td>Teachers / tutors</td>
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<td>Argumentation of choice of the studio</td>
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<tr>
<th>Graduation project</th>
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<td>Title of the graduation project</td>
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<th>Goal</th>
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<tr>
<td>Location:</td>
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<td>The posed problem,</td>
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<td>research questions and</td>
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<td>design assignment in which these result.</td>
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The posed problem

The population of Amsterdam is expected to rise significantly in the near future, with ever more immigration. The city needs to become an even more attractive place for businesses and human capital giving a boost to its economic growth. Especially, with the impact of Brexit, Amsterdam sees the chance to absorb much of the financial and business sector, becoming an important hub for the whole of the EU. Being in a prime geographical location and well connected, Amsterdam has the opportunity to develop into a world-class metropolis, remaining open, attractive and internationally competitive.

However, the city of Amsterdam faces an intense housing shortage with soaring prices and an often-substandard quality of the available stock. To remain competitive, the city needs to provide for its potential growth, with more high quality and affordable housing units. According to the city’s strategic plan for 2040, Amsterdam aims to densify, expanding its city centre beyond the historic belt while providing more high quality public spaces.

The densification of the city centre is a challenging issue considering its heritage status restricting new large scale developments, and the exorbitant land values hindering the affordability of new housing units. Additionally, the shortage of available plots puts an additional pressure, especially on the provision of public space. Many cities with similar issues see the solution in high-rise developments. However, as high-rise examples of the 20th century can depict, there is an underlying threat in the conditions created at ground floor level with an unused or even dangerous public realm, hindering the liveability of such environments.

Research Questions

- What are the design criteria for lively and safe public spaces in a metropolitan high rise environment?

- How can high rise structures be incorporated into the city fabric through the use of the plinth and eye level perception?

Design assignment

The resulting design assignment will consist of a mixed-use complex of buildings and public spaces, including a mixture of public, private and collective functions and new residential units, both high and low rise. The development aims to turn Frederikspleinbuurt into one of the highest density areas in the Singelgracht zone with approximately 700 new units. To accommodate the needs of the resulting density, public spaces will be addressed in a way to establish connections with the neighbourhood and ensure liveability on ground floor level.
### Process

**Method description**

The methodology to address the research questions and the design assignment consist of the following steps:

- Consulting relevant literature with design guidelines on the public realm with a particular focus on the design of plinths, extracting points to consider further in the research.
- Site visits to locations of perceived metropolitan character with high rise structures in place.
- Use of diagrammatic plans and sections examining the proportions and form of public space.
- Empirical research with in situ observation of the public realm. Emphasis on the plinths, their function and the activity in the immediate context, using photographs to record the observations.
- Use of photographs as a way to analyse the form and material treatment of the plinths and record the activity around them.
- Mass studies with 3d models exploring spatial concepts for the chosen site in line with the site’s immediate and broader context.
- 2d drawings and 3d impressions to test concepts against the conclusions from the research.

### Literature and general practical preference


**Reflection**

**Relevance**

The city of Amsterdam can embrace the opportunity of attracting more foreign businesses and economic growth by providing more and better housing to remain competitive. Global cities are growing, with the suburban sprawl no longer seen as a sustainable solution. Dealing with the growth should be realized mostly by densifying the existing fabric and realizing a high density in new constructions. Densification often comes at the expense of available public space due to the limited interest of developers in quality public spaces. A well-functioning public space can be the connecting element of increasingly fragmented societies and is therefore of the utmost importance. For a successful densification process, the public realm and its relationship with buildings plays an important role to guarantee the liveability of metropolitan environments and ensure social and economic, long-term sustainability.

**Time planning**

MSc4 (September 2017 - January 2018)

Weeks 1.1-1.9 (4th Sep – 3rd Oct)
- Definitive massing
- Definitive housing typologies & access system
- Definitive non-residential functions design
- Concept structural system
- Concept materialisation (indoor & outdoor)

Week 1.10 (6th Nov – 10th Nov)
- **P3 Presentation**

Weeks 2.1-2.4 (13th Nov- 8th Dec)
- Definitive structural system
- Definitive materialisation (indoor & outdoor)
- Definitive construction details

Week 2.5 (11th Dec – 15th Dec)
- **P4 Presentation**

Weeks 2.6-2.9 (18th Dec – 26th Jan) (incl. Christmas break)
- Final presentation preparation
- Final model building

Week 2.10 (29th Jan – 2nd Feb)
- **P5 Presentation**