**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>
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</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
<td>Eva Willemsen</td>
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<table>
<thead>
<tr>
<th><strong>Studio</strong></th>
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<tbody>
<tr>
<td><strong>Name / Theme</strong></td>
<td>Flowscapes</td>
</tr>
<tr>
<td><strong>Teachers / tutors</strong></td>
<td>Nico Tillie, Marc Ottolé</td>
</tr>
<tr>
<td><strong>Argumentation of choice of the studio</strong></td>
<td>Landscape Architecture Studio</td>
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<table>
<thead>
<tr>
<th><strong>Graduation project</strong></th>
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<tbody>
<tr>
<td><strong>Title of the graduation project</strong></td>
<td>A multi-dimensional biophilic city: Exploring how city green can be optimized by integrating the vertical-and rooftop green into the neighbourhood landscape.</td>
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<tr>
<th><strong>Goal</strong></th>
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<tbody>
<tr>
<td><strong>Location:</strong></td>
<td>Rotterdam</td>
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<tr>
<td><strong>The posed problem,</strong></td>
<td>Almost all of the large cities have an unhealthy stressful climate: air pollution, lack of water retention, lack of biodiversity, urban heat island effect, etc. Urban green is seen as a good solution to those problems. Due to the lack of space the Urban green has been translated into rooftop and vertical green. However this is mostly a local solution and doesn't provide a lot of social services.</td>
</tr>
<tr>
<td><strong>research questions and</strong></td>
<td>How can city green be optimized by integrating the vertical-and rooftop green into the neighbourhood landscape?</td>
</tr>
<tr>
<td><strong>design assignment in which these result.</strong></td>
<td>Context, theoretical framework, site analysis, regional- and local plan/strategy, detail design, reflection.</td>
</tr>
</tbody>
</table>

**In what way can urban green be optimized by integrating the vertical-and rooftop green into the neighbourhood landscape?**
- How can we transform large cities into more pleasant and liveable places with little space left?
- How do you design for the vertical-, rooftop- and ground level landscape and what kind of tools can be used?
**Process**

**Method description**

Theory Research

1. Research the ‘benefits of green space’ by building on current classifications of benefits of ecosystem services and make a critical reflection by comparing ESS with TEEB (The Economics of Ecosystems and Biodiversity) and BUGS (Benefits of Green Space).
2. Make a division between the green ‘ecological’ ESS (biodiversity, air filtering, microclimate regulation) and the red ‘social values’ ESS (physical- and mental health, socio-economic benefits) based on the red, green, yellow and blue labels of De Urbanisten.
3. Research how to design for the specific ecosystem services.
4. Analyzing the existing green spaces in Rotterdam together with its ecosystem services.

Design Method

1. Choose a testing site in Rotterdam that can meet with the design of multiple dimensions of green space.
2. Based on the research, choose the most important ecosystem services and how to design for it.
3. Develop a specific design for the district, neighborhood and building scale.
4. Reflect if the cultural values and benefits of the green can be optimized by the design proposal

**Literature and general practical preference**


Ryerson University, 2005. Report on the Environmental Benefits and Costs of Green Roof Technology for the City of Toronto, prepared for the City of Toronto, Department of Architecture, Toronto: sn


**Reflection**

**Relevance**
The graduation project aims to research the value of urban green dimensions and how to optimize green in the city. Therefore add value to
a. Spatial contributions
b. Ecological contributions
c. Economic contributions
d. Social contributions

The landscape design concept is not only a physical instrument but also a vehicle to value up urban space into architectonic, functional, ecological and economical landscapes. This approach aims a higher quality of city planning under the protection of original urban structure in a sustainable development.

**Time planning**