Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences
**Graduation Plan: All tracks**

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><strong>Name</strong></td>
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<tr>
<td><strong>Student number</strong></td>
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<tr>
<td><strong>Telephone number</strong></td>
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<td><strong>Private e-mail address</strong></td>
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<tr>
<th>Studio</th>
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<tbody>
<tr>
<td><strong>Name / Theme</strong></td>
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<tr>
<td><strong>Teachers / tutors</strong></td>
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<tr>
<td><strong>Argumentation of choice of the studio</strong></td>
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<table>
<thead>
<tr>
<th>Graduation project</th>
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<tr>
<td><strong>Title of the graduation project</strong></td>
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<th>Goal</th>
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<td><strong>Location:</strong></td>
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<td><strong>The posed problem,</strong></td>
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This translates in a modest, carefree and timeless space-user interaction, to establish this user-environment connection. It's a call for a return to a more sensuous time.

Key words: electric transport, functional-multiplicity, performance-oriented, renewable energy, sensuous architecture, transportation hub

research questions and research questions are related to the alterations of clean mobility, transport hub and the generation of sensuous spaces.

design assignment in which these result. The Maashaven Hill is designed to promote clean mobility (moving) and at the same time to raise awareness on environmental matters (standing still). This project makes use of computational strategies to maximize the performance-oriented issues like energy extraction.

### Process

**Method description**
The project will be developed by utilizing mainly bottom-up generative processes which can be parametrically altered. The main structure will be generated through agent-based modelling of the activities, in which environmental, structural and economic issues will be addressed.

### Literature and general practical preference


Reflection

Relevance
The value of this graduation project within the larger socio-cultural and scientific context is that it intends to contribute to an improved ecologically sustainable future which is needed due to the global climatic changes. Because the project is part of the World Expo 2025, it is able to address a large amount of visitors. From an architectural-research point of view, this project will offer a reliable methodology for producing and managing the production of meaningful but complex architectural geometries.

Time planning
Weeks 1 to 4 - Making of an extensive analysis of the site and its surrounding, considering not only existing, but also future needs, requirements and pressures. Agile Workshop, gain knowledge in Swarm Behavior. Concept development.

Weeks 5 to 9 - (Stage 1) Continuing Agile Workshop individually linked to concept development of graduation project, functional program, patterns of function.

Week 10 - P1 Presentation of individual position on the project.

Weeks 11 to 14 - Preparation of the Robotic Production and Operation Workshop and the Workshop itself. Write graduation plan.

Weeks 15 to 17 - (Stage 1 and 2) Finalize concept and pick site, functional program, patterns of
function. Generate computational sketches of generative systems. Hand in graduation plan.

Week 18 to 27 – Preparation P2 presentation: geometry samples and computational simulations.

General:
- master plan 1:1000 / 1:500
- programme / list of requirement, draft design (plans, sections, elevations) 1:200

Hyperbody:
(1) Interactive presentation showing concept, information models, and behavioural diagrams.
(2) 3D-4D parametric models showing the design within the site at the phase of design development.
(4) From 3D model obtained sections, plans, and views at appropriate scales 1:1000 - 1:1
(6) Digital documentation of all above including 300 words abstract describing project submitted via wetransfer.com.

Week 28 - P2 presentation (2 months extension due to personal circumstances, time planning is adjusted to graduate in October / November)

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Weeks 29 to 36 - (Stage 3) Further development of computational strategy and implementation of structural aspects. Evaluating success of design implementation in terms of experience, materialization and fabrication (structural) methods. Further development of the design.

Week 37 – Preparation P3 presentation: development of the computational strategy and structural implementations of the design proposal. Study models and more advanced scaled prototypes.

General:
- draft reflection
- design (plans, facades, cross-cuts, 1:200 / 1:100)
- part of the building (plan and cross-cut 1:50)
- façade fragment with hor. and vert. cross-cut 1: 20
- details 1:5

Hyperbody:
(1) Interactive presentation showing concept, information models, and behavioural diagrams.
(2) 3D-4D parametric models showing the design within the site at the phase of design development.
(4) From 3D model obtained sections, plans, and views at appropriate scales 1:1000 - 1:1
(6) Digital documentation of all above including 300 words abstract describing project submitted via wetransfer.com.

Week 38 - P3 Presentation

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Weeks 39 to 53 – (Stage 4 and 5) Finalizing the implementation of the computational strategy. Solving final technical implementations of the design proposal. Optimizing architectural geometries. Realizing models and advanced prototypes. Preparing for over-all optimization and design completion.

Weeks 54 – Preparation P4 presentation: finalization of the project including all the necessary and additional project-specific information.

General:
- theoretic and thematic support of research and design
- final reflection on architectonic and social relevance
- site 1:5000 / 1:1000, plan ground level 1:500
- plans elevations, sections 1:200 / 1:100
- part of the building, plan and drawings 1:50
- façade fragment with hor. and vert. cross-cut 1: 20
- details 1:5
- reflection based on template

Hyperbody:
(1) Interactive presentation showing concept, information models, and behavioural diagrams.
(2) 3D-4D parametric models showing the design within the site at the phase of construction design.
(3) Structure and materialisation design for NC production.
(4) From 3D model obtained sections, plans, and views at appropriate scales 1:1000 - 1:1.
(5) Physical models developed from the 3D parametric model by means of Rapid Prototyping and NC-production; photographs documenting production, assembly process, and final result.
(6) Digital documentation of all above including 300 words abstract describing project submitted via wetransfer.com.

Week 55 - P4 Presentation
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Weeks 56 to 60 - (Stage 6) Finalizing presentation of the project, final physical model, renders and details.

Week 61 - P5 Final Presentation (same requirements as P4, focus on project specific information)