<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>E-mail address</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Graduation Studio</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name / Theme</strong></td>
</tr>
<tr>
<td><strong>Teachers</strong></td>
</tr>
</tbody>
</table>

**Argumentation of choice of the studio**

I am interested in the theory of "multifunctional dike" which is usually applied in the central waterfront of the city to provide a pleasant public waterfront while protect the city from the flood. Thus, I choose the Delta Intervention studio and choose the most valuable waterfront of San Francisco Bay, Embarcadero as my research site.

**Graduation project**

| **Title of the graduation project** | The membrane of Embarcadero |

**Goal**

**Location:**
San Francisco, Embarcadero, Cruise Terminal site

**The posed problem**

i. The waterfront of Embarcadero (Meso-scale)
The waterfront of Embarcadero contains lots of existed buildings. They have great historic, functional values. However, they will be very vulnerable in the future because of the sea-level rise. The open spaces on the waterfront are always important. The present open spaces are disconnected by the existed buildings and roads. In the future, the open views on the open spaces might be blocked because of the new seawall.

ii. Cruise Terminal site (Micro-scale)
Cruise terminal site is a 50,000-sqm triangular site which consists of a newly built cruise terminal and other to-be-renovated areas. There are great number of passengers who will come to the site by international cruise ships. They are mainly tourists and will take one-day tours of San Francisco city. However, the existed tourism facilities need to be improved to provide better tourism experiences.

**Research questions and Design assignment in which these result**

i. The waterfront of Embarcadero (Meso-scale)
Research questions:
How to protect the existed buildings and create better open spaces on the waterfront?

Design assignments:
Designing a membrane which integrated with the existed buildings and infrastructures as a new continuous megastructure. The vertical parts of the membrane become the new seawall of Embarcadero to protect the existed buildings and the city. The horizontal parts of the membrane on the rooftop of the existed buildings become the new open spaces of the waterfront.

ii. Cruise Terminal site (Micro-scale)
Research questions:
How to improve the present tourism facilities?

Designing the membrane as a complex which consists of different tourism functions as the compensation of the cruise terminal on the site.
**Process**

**Method description**
1. Research and collect data of San Francisco
2. Research the related theories.
3. Propose the urban strategy for the Embarcadero which is based on the data and theories.
4. Design Cruise terminal site as a compartment of the Embarcadero which could show the design principle of urban strategy.

**Literature and general practical preference**
Research data: City and County of San Francisco
Theories: Flowscape, multifunctional dike, mega structure
Precedents: Big U, high line

**Reflection**

**Relevance**
The value of the graduation project in the larger social and scientific framework:
1. The design of multifunctional dike is a practice of architecture designed as infrastructure as landscape.
2. The urban renovation is one of the main themes for the urbanized cities.
3. The design process shows a urban strategy realized in an architectural scale, which emphasizes the role of architects in urban issues.

**Time planning**
P1: Site analysis and theoretical research; The proposal of the strategy.
P2: Design of architecture mainly from a perspective of urbanism; Paper of the related theories.
P3: Design of architecture with spatial, technological solutions.
P4: Design of architecture with details; Final drawings.