

DESIGNING CITIES OF THE WORLD 2018

URBAN AND ENVIRONMENTAL DESIGN STUDIO 1.2

POLITECNICO DI MILANO SEDE DI PIACENZA

FUNCTIONAL PROGRAM

To vehicle the integration of this nowadays so isolated piece of town a mixed-use program is proposed. To highlight this segment of the long seashore promenade, within the mixed-use program a specific function is proposed.

About 70% of Barcelona's economy directly or indirectly is based upon tourism.

In the last years the number of tourists arriving by sea is constantly increasing. In terms of (cruiser) passengers Barcelona Port is the first in the Mediterranean Sea. In terms of products (containers) it is one of the great hubs of south Europe.

The busy activity of Barcelona port, in consonance with the worldwide growth of sea transport, asks for specifically trained workforces.

Nowadays sea-related higher education is split in separated curricula and universities. To concentrate them in order to exploit their synergies is the starting point of this project.

The new Sea Campus will include educational buildings, cultural facilities, leisure facilities, and related residential buildings, taking advantage of the already existing sport facilities. All together will build up a little town in itself. One of the challenges is to make this piece of town as permeable as possible.

We will focus our main attention on the college, which works like any other university, with spaces and rooms that fulfil the specific requirements related to the different study programs and that should enhance transversality of knowledge and cooperation.

The campus includes a canteen open to everybody, which together with the hotel provides internship and compulsory business practise to the students.

An interpretation centre and a specialized public library, with integrated documentation archive, complete the offer.

In close relation to the campus residential buildings will host students and teachers. Social housing will avoid gentrification of the area. These buildings should provide some smaller services run by privates.

Campus and housing area have to act as connectors between the surrounding neighbourhoods, attracting people from outside and being permeable to peoples' cross-through movements. Activities will only be successful if they extend from the interior to the contiguous public space.

The other aim in the origin of this project is the connection along the sea front: an "overall" public space, in form of a promenade or boulevard for pedestrian and bikers, will link the neighbour segments and complete the intermunicipal linear park along the coast.

Site surface:	Total	300.000 m2
Min. Open Space	≥	100.000 m2
Max. Residential	≤	80.000 m2
Max Facilities	≤	40.000 m2

Based on these indicative figures the proposal will count with a **minimum** of:

A OPEN SPACE >100.000 m2

>90.000 Park
Promenade
Beach

>5.000 Urban orchards

B FACILITIES, SERVICES 30.000 m2

22.000 Educational
5.000 Commercial (private)
3.000 Cultural

C HOUSING 52.000 m2

20.000 Students residence
6.000 Teachers and visitors residence
4.000 Hotel
22.000 Social integration housing

D PUBLIC SPACE 30.000 m2

directly related to buildings 10.000 Parking lots
20.000 Infrastructure and urbanization

A	OPEN SPACE
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Park		
Shore promenade		
Beach	(with recreational and open-air sport areas)	>90.000m2
Urban Orchard		>5.000m2

D	PUBLIC SPACE directly related to buildings	18.000 m2
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Parking lots 10.000 m2
spread, street level

Infrastructure and urbanization 20.000 m2

Educational:

The Sea University Campus 22.000 m2

Nautical Faculty

Naval and Oceanic Engineering
Management and Operation of sea-related Energy Installations

Nautical and Maritime Transport Management (Marine Officers)

Nautical Architecture

Ship Design
Interior Design
Furniture, Decoration, Graphic Design

Administration and Management

Intermodal Transport, Logistics and Customs Management
Shipping Companies Management: Cruise Companies
 Cargo ship Companies

Tourism and Hospitality Management

Hospitality Management: Management and Administration of Leisure Shipping/Cruisers
Tourism Management: Maritime Tourism Business Management
 Maritime Tourism Planning and Sales

Culinary and Gastronomic Sciences

High Cuisine and Gastronomy Innovation
Culinary Management and Food Industry Innovation

Sea University Central Services

Entrance hall, reception
Central administration
Meeting rooms
Aula magna

Nautical Faculty

(Entrance hall, reception)
Departments and teachers' offices
20 classrooms theory 50-100 m2
20 classrooms workshop 20-60m2
4 classrooms polyvalent 60-120 m2
Auditorium/ Multipurpose hall
Study rooms
Rest rooms
Cafeteria or Dining area
Storage
Technical installations
Bike storage

Nautical Architecture Faculty

(Entrance hall, reception)
Departments and teachers' offices
10 classrooms theory 50-100 m2
10 classrooms workshop 20-60m2
2 classrooms polyvalent 60-120 m2
Auditorium/ Multipurpose hall
Study rooms
Rest rooms
Cafeteria or Dining area
Storage
Technical installations
Bike storage

Administration and Management

(Entrance hall, reception)
Departments and teachers' offices
20 classrooms theory 50-100 m2
10 classrooms seminar 20-60m2
4 classrooms polyvalent 60-120 m2
Auditorium/ Multipurpose hall
Study rooms
Rest rooms
Cafeteria or Dining area
Storage
Technical installations
Bike storage

Tourism and Hospitality Management

(Entrance hall, reception)
Departments and teachers' offices
20 classrooms theory 50-100 m²
10 classrooms seminar 20-60m²
4 classrooms polyvalent 60-120 m²
Auditorium/ Multipurpose hall
Study rooms
Rest rooms
Cafeteria or Dining area
Storage
Technical installations
Bike storage

Culinary and Gastronomic Sciences

(Entrance hall, reception)
Departments and teachers' offices
10 classrooms theory 50-100 m²
20 classrooms workshop 20-60m²
4 classrooms polyvalent 60-120 m²
Auditorium/ Multipurpose hall
Study rooms
Rest rooms
Cafeteria or Dining area (for students)

Restaurant (with kitchen, open to the public)

Storage
Technical installations
Bike storage
Orchard and species garden

Commercial:

Canteen 1.000 m2

Entrance
Dining room
Kitchen
Storage
Technical installations

Private shops and services 4.000 m2

Spread, retail

Commercial
Gastronomic
Services
Etc.

Cultural:

Library and Documentation Center (specialized in Nautical) 2.000 m2

Entrance hall
Attendance and administration
Office rooms
Meeting rooms
Book reading area (open shelf)
Magazine and Newspaper area
Media, video, show and music area
Children area

Exhibition
Conference room

Research area with study rooms
Archive

Restrooms
Storage
Technical installations

Interpretation Center 1.000m2

Entrance hall, reception
Administration offices
Cloakroom
Exhibition rooms
Multipurpose room
Restrooms
Cafeteria
Shop
Storage
Technical installations

Students residence(s) 20.000m2

100 apartments for 4 inhabitants	2 bathrooms, kitchen, living room, at least 2 separable rooms
100 apartments for 2 inhabitants	1 bathroom, living room with kitchenette and sleeping area
100 single rooms	1 bathroom; 1 kitchen for every 8 rooms
200 double rooms	1 bathroom for every 2 rooms, 1 kitchen for every 8 rooms

Reception/administration

Shared rooms: dining, TV, reading, study spaces, home gym, etc.

Laundry

Bike storage

General storage

Technical installations

Teachers and visitors residence 6.000m2

80 apartments for 1-2 inhabitants	1 bathroom, living room with kitchenette and sleeping area
100 single rooms	1 bathroom, 1 kitchen for every 8 rooms

Reception/administration

Shared rooms: dining, TV, reading, study spaces, home gym, etc.

Laundry

Bike storage

General storage

Technical installations

Hotel 4.000m2

- 100 double rooms
- 20 single rooms
- 10 suites (double room + living room)

Entrance hall

Reception/administration

Living rooms: TV, reading, study spaces, home gym

6 Meeting rooms

3 Dining rooms

Laundry

Bike storage

General storage

Technical installations

Underground parking

Social Housing 22.000 m2

100 apartments for 6 inhabitants	2 bathrooms, kitchen, living room, 3 separable rooms
100 apartments for 4 inhabitants	2 bathrooms, kitchen, living room, 2 separable rooms
100 apartments for 2 inhabitants	1 bathroom, kitchen, living room, 1 separable room
Bike storage	
General storage	
Technical installations	