Piri Reis University Main Campus

Design Kreatif Mimarlik · Aydan Volkan, Selim Cengic, Mehmet Cengic (www.kreatifmimarlik.com)
Design Team Onur Arat, Aysegul Kapisiz, Nihat Kalfazade, Ufuk Berberoglu, Erhan Ilicali
Location Istanbul, Turkey Built Area 60,000㎡ Finish Corten, Aluminium, Glass, Concrete, Steel
Construction Sera Yapi Photographs Omer Kanipak, Orhan Kolukisa, Cemal Emden
Editor Kim Eun-ji

설계 크리티프 미마리크 · 아이단 볼칸, 셀림 센긱, 메흐메트 센긱 위치 터키 이스탄불 면적 60,000㎡
마감 강판, 알루미늄, 유리, 콘크리트, 강철 시공 세라 야피 사진 오머 카니팍, 오르한 코루키사, 세말 엠든
에디터 김은지

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©Omer Kanipak_Exterior

©Orhan Kolukisa_Open-air walkway

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Piri Reis Maritime University provides higher maritime education and applied training in Tuzla district of Istanbul, Turkey. The project consists 60,000 sqm covered area in eight interconnected blocks. The campus is designed with the utmost contemporary sustainability principles that resulted with the BREEAM's "very good" certificate.

The project allocates an intense programmatic function in fragmented blocks embedded in a sloped site. The basic aim was to create open-air public spaces among blocks where students and academic staff may interact with each other through out the day. The steep slope of the terrain and the fragmented blocks are utilized to minimize the perception of the overall campus silhouette. An open-air walkway extending on the north-south direction of the site binds the six interconnected blocks over the ground. This spine defines the main circulation path of the overall campus and enables the experience of the continuous sea view within the campus.

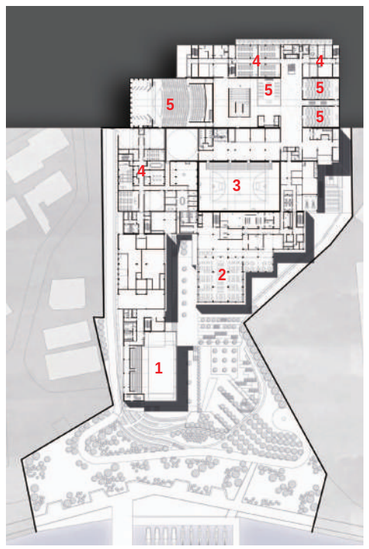
While the architectural style of the blocks is being developed, a well-known naval terminology, "Neta" meaning "neat, safe, efficient" was projected as the design concept keyword. Since the spatial planning and operation principles of ships and dockyards are based on simplicity, plainness and efficiency, this concept was very much appropriate with the use of brutal materials and functionalist simplicity of the overall layout. In order not to disturb the natural coastline, building blocks are located closer to the northern border of the site, leaving a spacious green area on the south. This coast area embraces a public pedestrian way that is linked with the adjacent residential district, and a pier for the seaboard training for students. The blocks parallel to the coast are allocated for educational, administration and social facilities where as the blocks vertically placed to the sea incorporate training pool, labs and classrooms.

The upper floor of the social block that has the best vista of the sea is reserved for library. The middle floor of this block is designed as a living passage including small food and beverage shops, ATM units and a mid-sized coffee shop whereas the ground floor is designated as the general cafeteria for lunch meals. The main spine reaching from north to south is fragmented into smaller pieces with niches, terraces and different levels to avoid a monumental and harsh axis. The prevailing wind is tamed by the utilization of the blocks parallel to the sea, so that inner courtyards are protected from severe winds. This layout also helped to benefit from the sunlight efficiently. The spaces that do not need daylight are placed underground while the raised floors and terraces of those places created the open spaces between the building blocks. Detached entrances enable the access to these blocks with surrounding bicycle and vehicle roads thanks to the utilization of the topography.

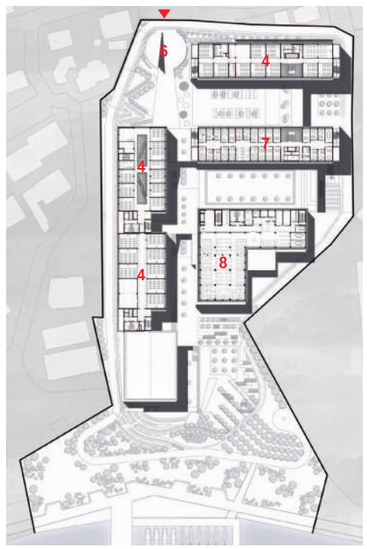
"Sustainable life" and "energy saving" are major principles of any vessels on the sea and thus "green campus" concept is adopted from the very beginning. The campus generates 45% of its own electric energy, and excess heat energy from this electricity production is used for heating and cooling of the buildings. Fresh water is obtained by purifying seawater and grey and rainwater is used for sanitary and landscaping irrigation purposes. These and many other precautions on sustainability make the Piri Reis Maritime University as the first green campus of Turkey.

©Cemal Emden_Hall

1. Training pool
2. Dining hall
3. Sport facilities
4. Education & laboratory
5. Multi purpose hall
6. Entrance
7. Administration
8. Library



Bottom floor plan



Upper floor plan

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터키 이스탄불 투즐라에 위치한 피리 레이스 해양 대학은 해양 교육 및 응용 훈련을 제공하는 기관으로, 8개의 지구에 걸쳐 6만 평방미터의 규모로 완성되었다. 학교측에서는 학생과 교수진이 상호 소통할 수 있는 개방형 공간으로 설계할 것을 요구했다. 이에 가파른 경사 지형과 곳곳에 흩어진 구역들을 연결하고자 곳곳에 개방형 통로를 도입하고 부지의 남쪽에는 녹지공간을, 북쪽에는 건물을 주로 배치했다. 특히, 건물은 바다와 평행으로 자리하고 있어 우세풍을 완화시켜 내부 중정을 보호하는 동시에 캠퍼스 내에서도 해안 풍경을 감상할 수 있게 한다.

내부 공간은 단순함, 안전함, 효율성의 의미를 지닌 해양 용어인 '네타(Neta)'를 콘셉트로 하여 디자인되었다. 이에 햇빛이 필요하지 않는 공간은 지하에, 1층에는 식사를 할 수 있는 간이식당을, 중간층에는 소규모의 식음 매장과 카페를, 멋진 조망을 갖춘 상층에는 도서관이 배치되었다. 이밖에도, 지속 가능성과 에너지 절약을 바탕으로 한 기술을 도입하여 전력 생산에서 남는 열에너지를 건물의 냉 · 난방에 사용하거나, 바닷물을 정수하여 조경 관개에 활용하는 등 친환경적인 설계로 영국의 친환경 건축 인증 제도인 브리엄(BREEAM)의 '매우 양호' 등급을 획득하기도 했다.

이곳은 대지의 조건을 잘 활용한 효율적인 건물 배치 및 지속 가능성을 고려한 시스템이 도입되어 터키 최초의 녹색 캠퍼스를 실현하고 있다.

©Cemal Emden_Multi purpose hall

©Cemal Emden_Lounge in library

©Cemal Emden_Seating area

©Cemal Emden_Classroom & corridor