

Site plan  
總平圖

Design: 2002-2004.8  
Location: Songshanhu New Town, Dongguan City, Guangdong Province  
Total floor area: 20 860m<sup>2</sup>  
Site area: 5 562 m<sup>2</sup>  
Building height: 14m

設計時間: 2002年—2004年8月  
地點: 廣東省東莞松山湖新城  
總建築面積: 20 860平方米  
佔地面積: 5 562平方米  
建築高度: 14米

## Electron Department of Dongguan Institute of Science and Technology

東莞理工學院電子系館

Design company: Atelier DESHAUS

Design team: Liu Yichun Zhuang Shen Chen Yifeng Tang Yu He Yangsong

建築師: 大舍建築師事務所

設計小組: 柳亦春 莊慎 陳屹峰 唐煜 何楊松

Dongguan Institute of Science and Technology owns a newly built campus. The site is located amid a hilly country with varied rises and falls inside the Songshanhu New Town of Dongguan, whose hills are covered with litchi trees and laps are natural ponds. The Electron Department of the institute is situated on the southeast side of a 20m-high hill. In the original design, this hill planned to be surrounded by buildings to avoid being engulfed by enormous building sizes, and one side of the hill facing the water surface northeast was planned to be open so as to maintain its originally continuous landform at least on one side.

Owing to the unavoidable gigantic size and scale, the building of the Electron Department adopts the clear horizontal lines configured along the long side of the hill, parallel to contour lines, juxtaposed with the fluctuated hill, in order to reinforce the interdependent coexistence. The linear body is decomposed into two front-and-back overlapping lines riding on the slope, with the building viewed only as a flat but modest two-level body closely from the south side. A few ascending passages and stairs while crossing the horizontal body revive the experience of climbing the hill along the original topographic direction. However, while people are walking along the corridor inside the building, the transparent space emerging at intervals is again bringing the scenery of the other side in sight. The green on the hill of the north side is penetrating along the U-shaped glass surface on both sides of the transparent space. Thus, the building has established the special interrelationship with the terrain.

The shape of the building is the outcome of the topographic strategy while the façade of the building directly reflects the local climatic features. The high full-depth side corridor or the concave downward inner courtyard not only provides a broad traffic and communication space, but also offers a shading space in the sweltering weather. This is not simply a shading apparatus intended for energy saving or indoor comfort, but provides a shading and shelter space where people are willing to stay no matter how

scorching the sun is or how heavy the storm is.

The building of the Electron Department has the main spaces applied with the unidirectional grid strip structure, whose direction is represented differently in conformity with the rationality of the forces. Then, distinct senses of rhythms are conveyed among spaces of different sizes and spans, including the corridors, classrooms and labs, etc, so as to become an important attribute of each space. This happens to coincide with our intent to create an indoor space with a certain spirit of science and reason.

東莞理工學院是一座全新建造的校園。基地坐落在東莞松山湖新城裏綿延起伏的丘陵地帶。山丘上長滿了荔枝樹，山坳則是天然的水塘。理工學院的電子系館選址在一個高約20米的山丘東南側。在原有的規劃中，這個小山丘為建築所環繞。為避免巨大的建築體量將地形吞噬，山丘朝向東北側水面一邊被敞開，以保證至少有一側還能看到原來持續的地形。

因為無法避免的巨大體量規模，電子系館建築採用了明確的水平直線形體量沿着山丘的長邊平行於等高線布置，與自然起伏的山體并置，以強化它們相互之間的共存性。綫形體量被分解為兩個騎在山坡上前后錯疊建築。這使得建築從南側的近處看只是一個扁平而不起眼的兩層體量。數條拾坡而上的垂直穿越水平體量的通道與樓梯再現了沿原本地形方向上山的道路，而當人們在樓內沿走廊水平進時，間隔出現的穿透空間又可將

另一側的景色帶入眼簾。北側山丘上的綠色沿着穿透空間兩側的U型玻璃表面滲入，建築以此建立了和地形的特殊關係。

建築的形體是地形策略的結果，而建築的立面則直接反映了當地的氣候特征。通高的大進深扁柱外廊或下凹的內庭既提供了寬敞的交通和交往空間，也為垂直陽光下炎熱的嶺南天氣提供了有拔風作用的遮陽空間。它不是一個簡單的著重於節能或室內舒適性的遮陽裝置，而是提供了一個不論是驕陽似火抑或暴雨傾盆人們都樂於停留的蔭涼和遮蔽空間。

電子系館的主要空間均採用了單向的密肋梁結構。密肋梁的方向因受力的合理性而在空間中呈現不同的方向。于是在走廊、教室、實驗室等不同大小和跨度的空間內均展現不同的節奏感。從而成為各空間自身的重要屬性。這也和我們想要創造一個具有某種科學理性精神的室內空間的意圖不謀而合。





Situation  
位置圖

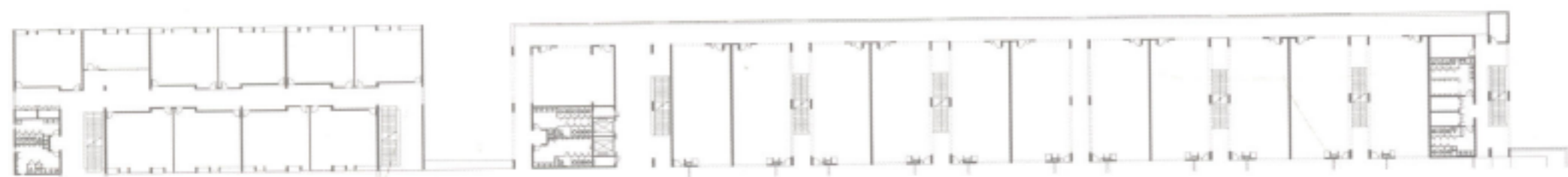




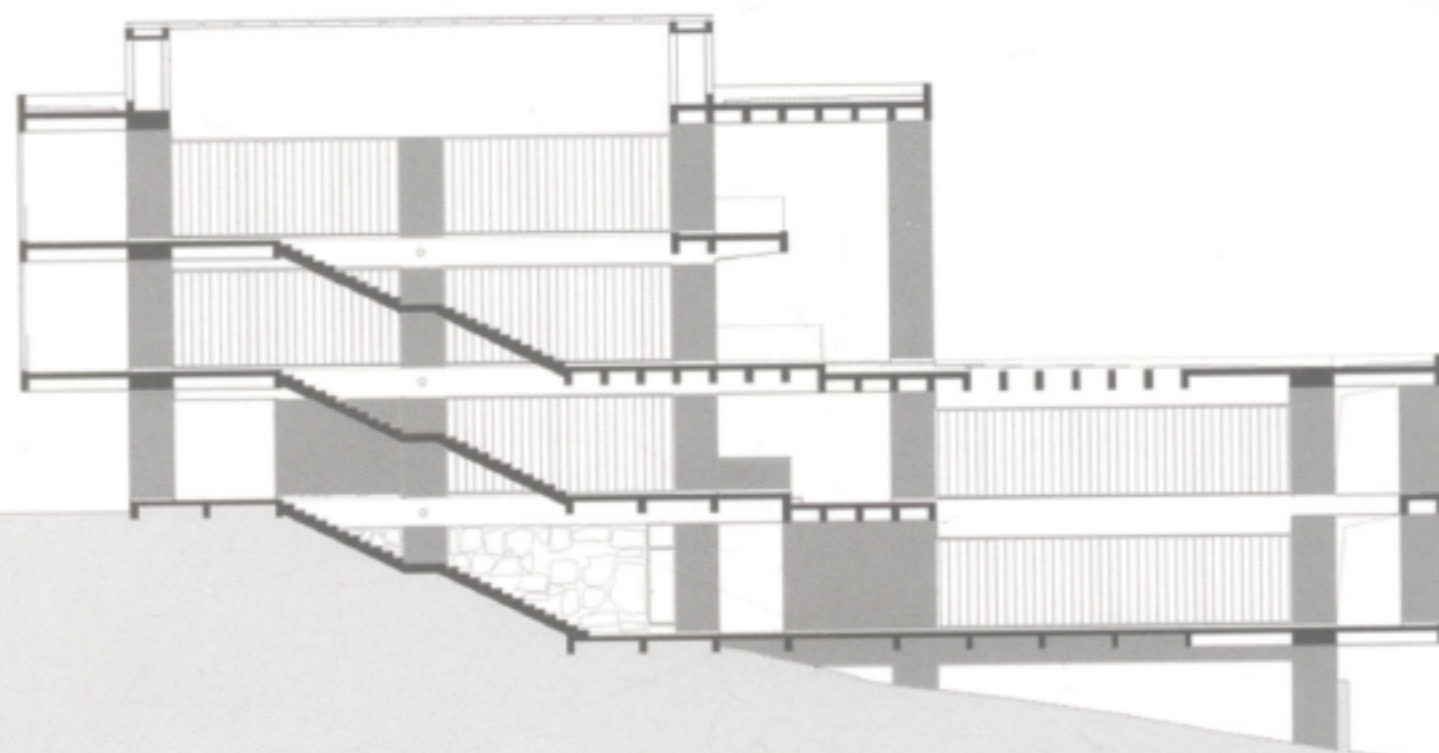
電子館  
6号機



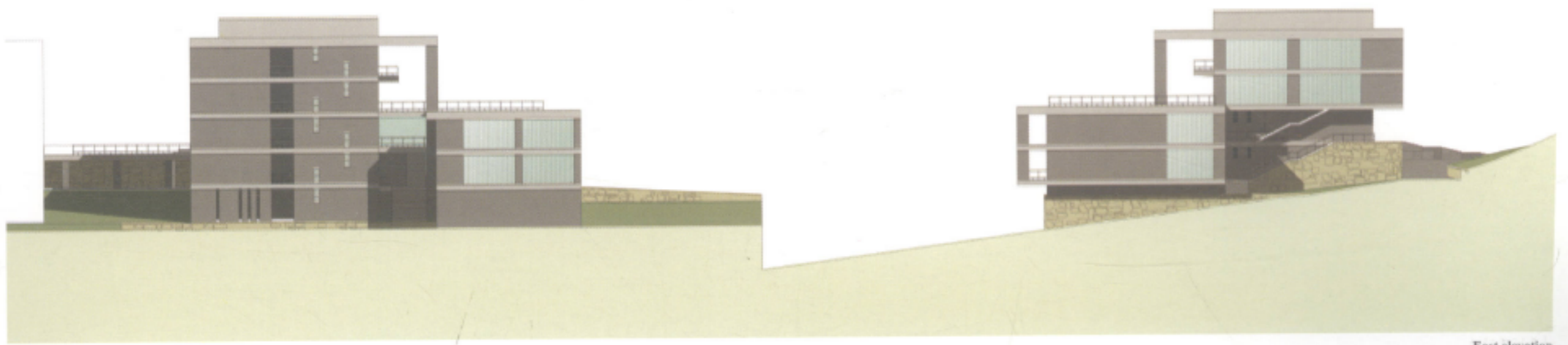




3rd floor plan  
三層平面圖



Section  
剖面圖

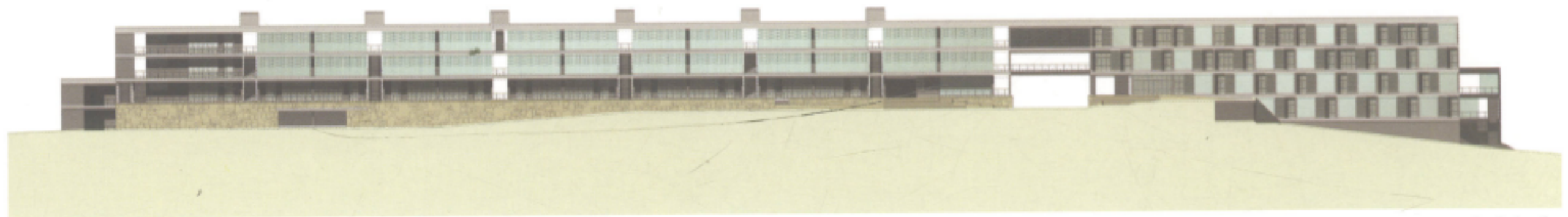


West elevation  
西立面

East elevation  
东立面



South elevation  
南立面



North elevation  
北立面