Inside Outside

THE INDIAN DESIGN MAGAZINE

ISSUE 270 DECEMBER 2007 Rs 50

Elements of style by architects:
Hiranti Welandawe
Mallika Kumar
Ritu Prasad
Shankar Prasad

Small spaces go a long way

A learning institute with a difference

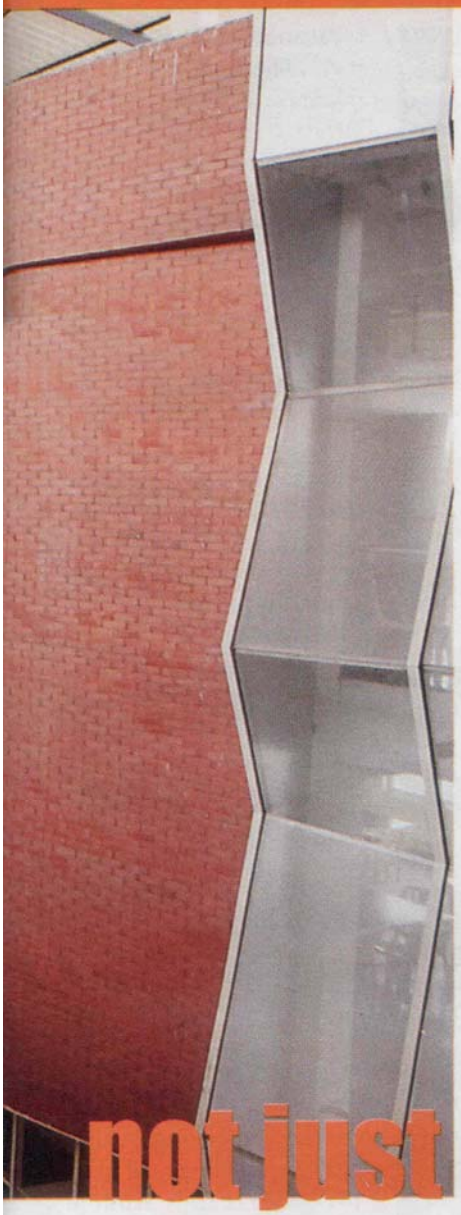
The amphitheatre overlooking the learning street is a hospitable space for hosting events. A huge steel truss anchored to the roof projecting on top of the street serves as the Prinicpal's cabin. With no columns on the street, the Principal's office on top allows free and easy pedestrian movement below.

This engineering college is unique! Conceptualized as a contemporary 'educational village', it comprises distinct faculty blocks connected by an interior promenade, with spaces for student learning activities. The college authorities, realizing that the strict formality and physical structure of conventional institutions did not encourage the spontaneous interaction that they thought was necessary, decided an entirely fresh approach was needed.

The architects suggested involving students and educators in the definition process to understand the relationship dynamics between faculties, resources, student groups and the community. This refined the understanding of how the institute actually functioned at a social level.

The architects were given stringent guidelines: they had to optimize on construction costs, allocate resources judiciously and manage with

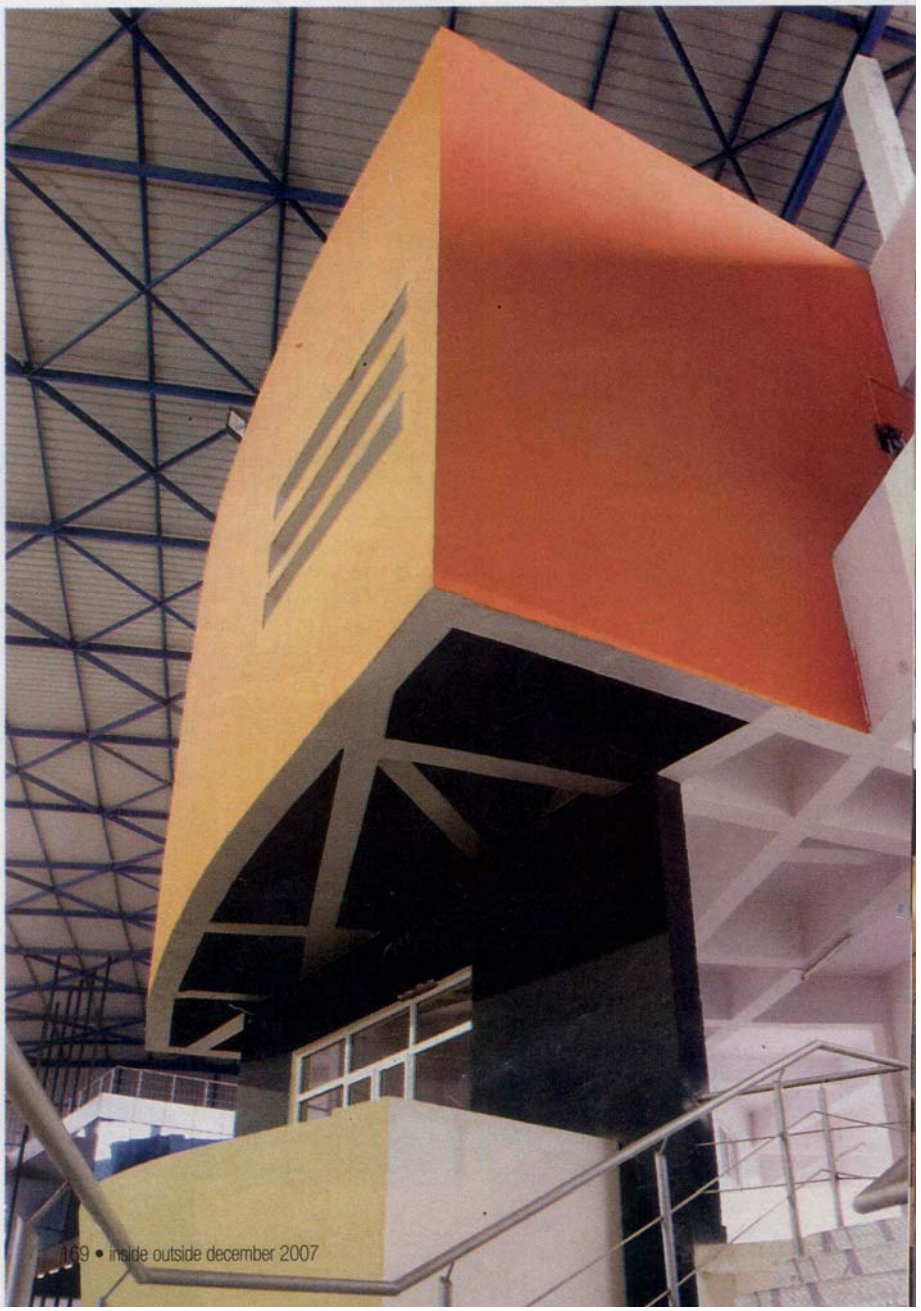
Instead of opting for conventional urban verticality, the architects chose to experiment with horizontal urbanism and hit on the idea of an 'educational village' built within a container.



not just another brick in the wall

Pink Floyd's anthem 'We don't need no education' certainly would not apply to students at the Vidyalankar Institute of Technology in Mumbai. In a radically different design for an educational institution, Kalhan Mattoo, Santha Gour Mattoo and Jainish Jani of Planet 3 Studios have brought a 'campus' into a building and created a whole new concept of learning and socializing, making it a fun place to go to every day!

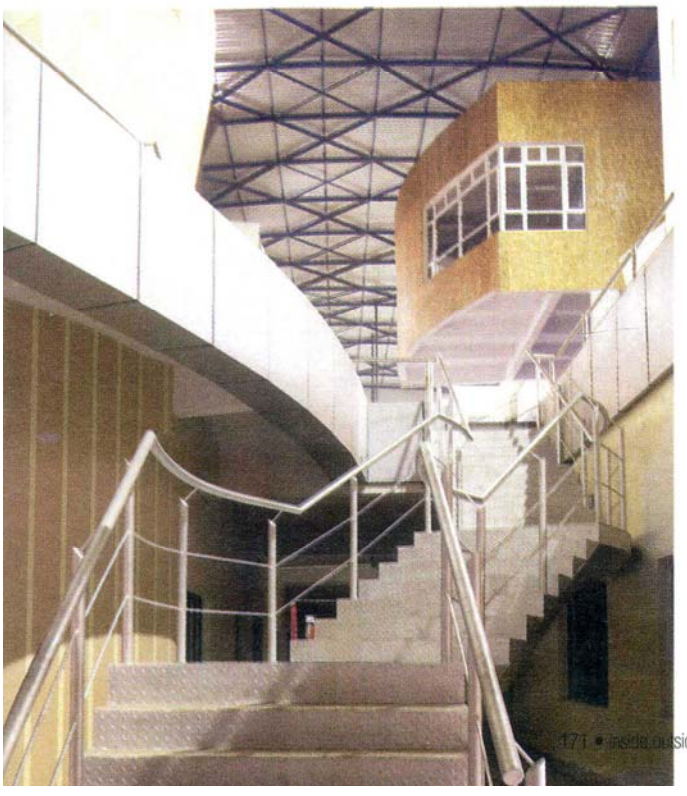
PHOTOGRAPHS: **MRIGANK SHARMA** COURTESY: **THE ARCHITECTS**



local materials and workmen. The building had to minimize its impact on the environment, possess ample natural light and ventilation and use minimum electrical energy in view of the local power deficit.

The other challenge lay in articulating the requirements of four distinct engineering faculties within the same building and establishing network accesses to shared amenities. The design had to be simple, flexible, of equitable use, work within context and constraint, communicate ideas visually, be experimentally satisfying, conform to restrictive building codes, demonstrate environmental sensitivity and most important, enable forward learning concepts.

Say the architects, 'Instead of opting for conventional urban verticality, we chose to experiment with horizontal urbanism and hit on the idea of an "educational village" built within a container. A main "Learning Street" is the central organizing device, as well as a congenial place for spontaneous student interactions. Each department, such as administration, library, engineering faculties, canteen, etc, is an individual block situated on either side of the inner street. And each block functions as a self contained facility with its own faculty, library, learning spaces, connected at various levels with adjacent structures.



Left: The classrooms clad in recycled sleeper wood have 'spill-out balconies' that open into the inner street. Each classroom has two side windows which allow sunlight and proper ventiliation.

Below: The studio clad in recycled chip wood, is cantilevered 18 feet above the basement.

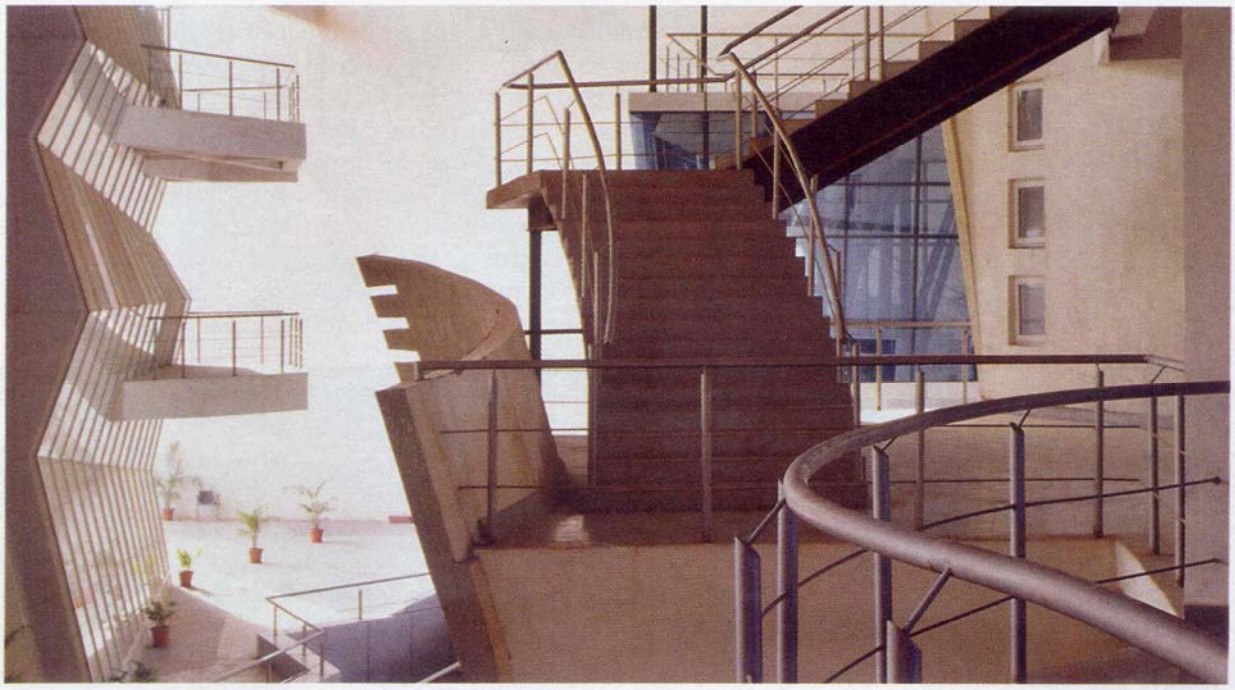
The dynamic design of this institute displays the ingenuity and creativity of this young design team.

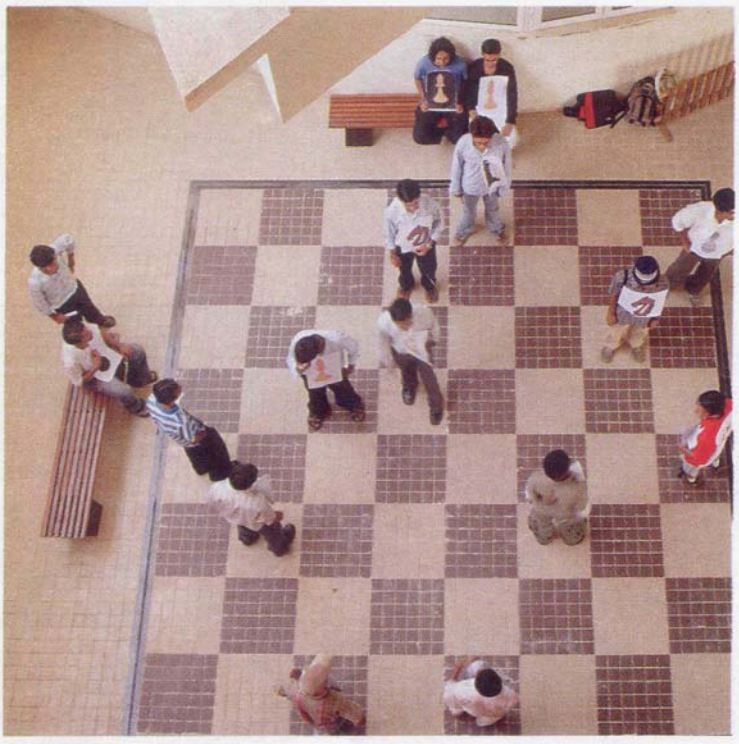
This street at six feet above ground level sits on a basement housing laboratories, a shared resource between different faculty blocks. Staircases in cut-outs on the street lead to the basement below. The building container opens with a forty foot wide main entrance and a smaller subsidiary opening to the road outside with no barriers for unrestricted entry.

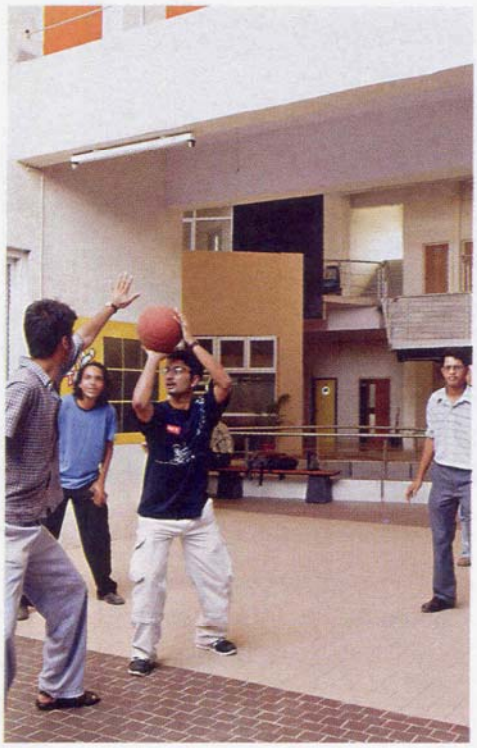
'On the street, helpful signage guides you to your destination with the ease of intuitive logic. We have maintained the intimacy of the human scale and provided numerous activities to promote interaction. Tucked in the alcoves between the blocks are a man-sized chessboard, a table tennis court, half a basketball court, a street side café with the canteen block, a couple of phone booths, a book kiosk, a graffiti wall, student work display areas, and a suspended amphitheatre.

'Clusters of classrooms with student interaction zones tucked in between function as "Learning Suites". Many classrooms have "spill-out balconies" that open into the inner street. Wherever required, flexibility to combine two classrooms to form one large space has

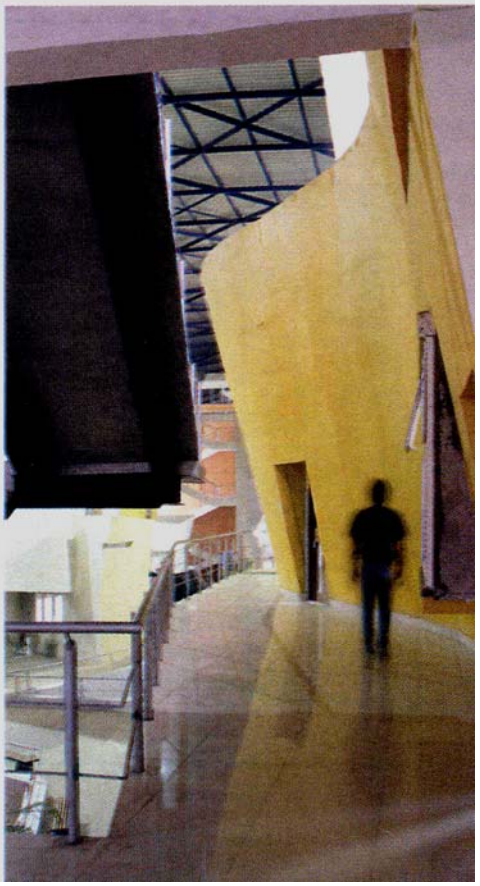
The 'Learning Street', the core of the 'educational village', with zones for sports, telephone booths and vending machines, provides multiple opportunities for students to engage in physical and mental activities. These spaces promote social interactions that enhance the overall cultural quotient of the institute.

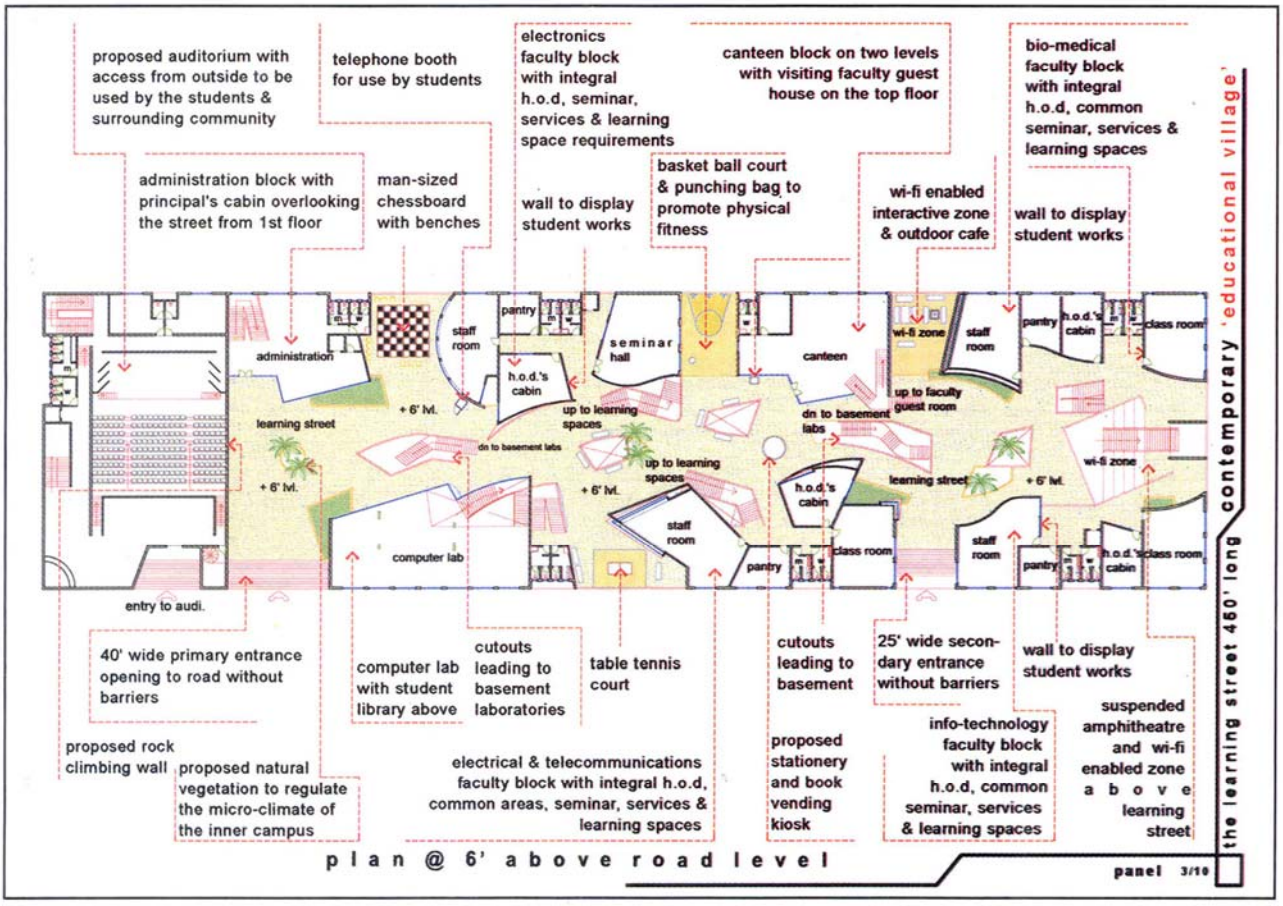


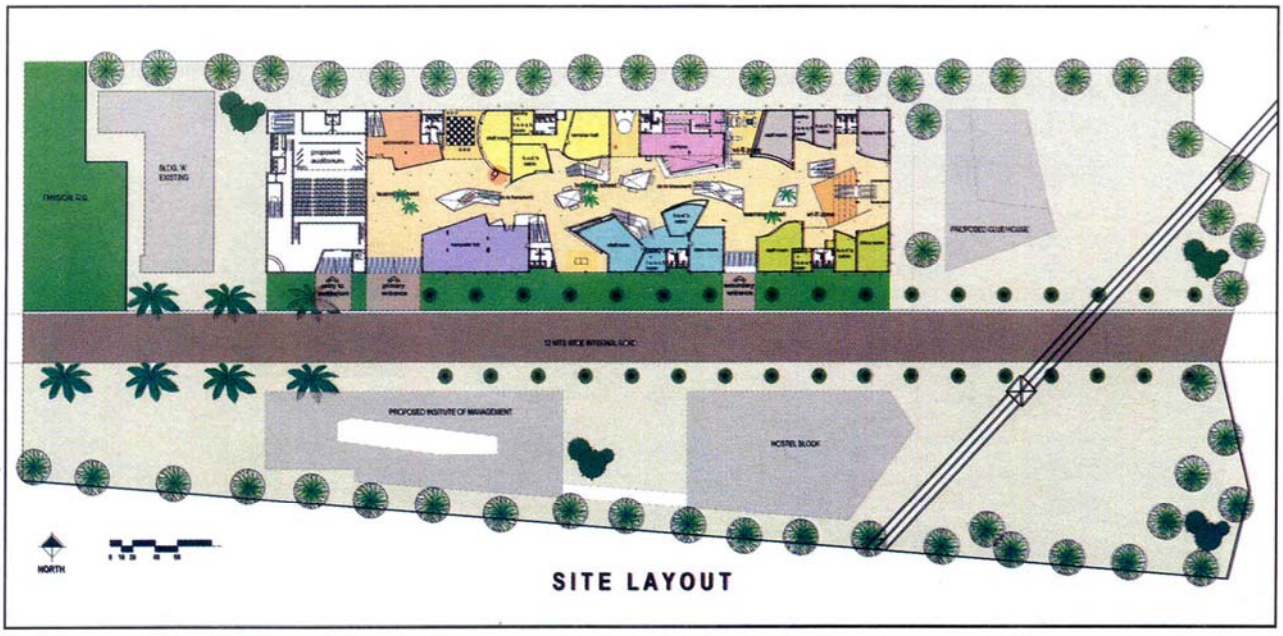


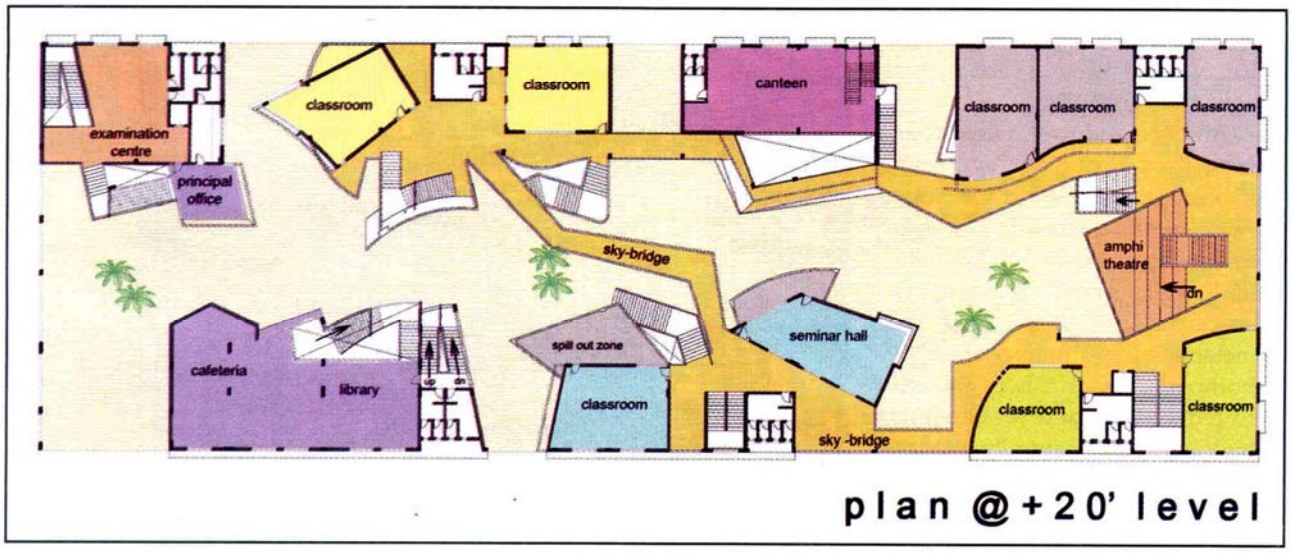


Each department is an individual block situated on either side of the inner street. Each block functions as a self contained facility with its own faculty, library, learning spaces, connected at various levels with adjacent structures.




proposed auditorium with access from outside to be used by the students & surrounding community
telephone booth for use by students
electronics faculty block with integral h.o.d, seminar, services & learning space requirements
canteen block on two levels with visiting faculty guest house on the top floor
bio-medical faculty block with integral h.o.d, common seminar, services & learning spaces
administration block with principal's cabin overlooking the street from 1st floor
man-sized chessboard with benches
wall to display student works
basket ball court & punching bag to promote physical fitness
wi-fi enabled interactive zone & outdoor cafe
wall to display student works
the learning street 460' long contemporary 'educational village'
administration
staff room
pantry
seminar hall
h.o.d.'s cabin
canteen
wi-fi zone
staff room
pantry
h.o.d.'s cabin
class room
learning street
+ 6' lvl.
up to learning spaces
up to faculty guest room
dn to basement labs
dn to basement labs
up to learning spaces
wi-fi zone
learning street
+ 6' lvl.
computer lab
staff room
h.o.d.'s cabin
pantry
class room
staff room
pantry
h.o.d.'s cabin
class room
entry to audi.
40' wide primary entrance opening to road without barriers
computer lab with student library above
cutouts leading to basement laboratories
table tennis court
cutouts leading to basement
25' wide secondary entrance without barriers
wall to display student works
suspended amphitheatre and wi-fi enabled zone above learning street
proposed rock climbing wall
proposed natural vegetation to regulate the micro-climate of the inner campus
electrical & telecommunications faculty block with integral h.o.d, common areas, seminar, services & learning spaces
proposed stationery and book vending kiosk
info-technology faculty block with integral h.o.d, common seminar, services & learning spaces
plan @ 6' above road level
panel 3/10

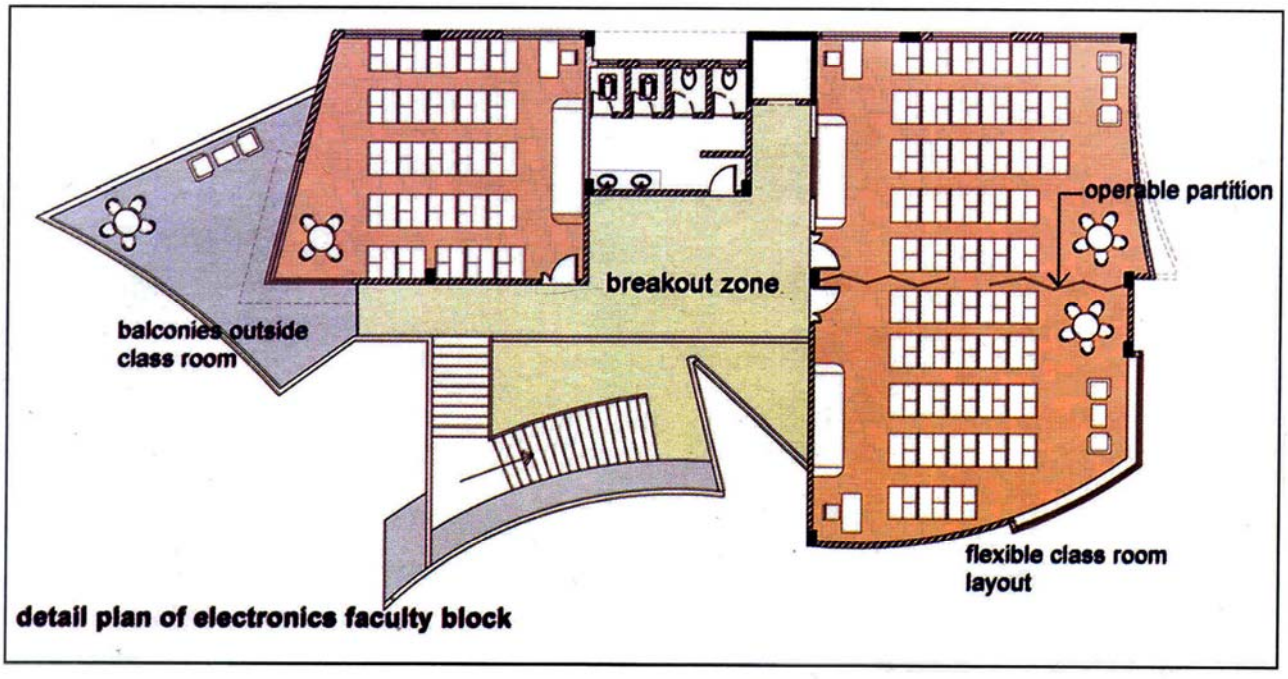

BLDG 'A' EXISTING
PROPOSED AUDITORIUM
PROPOSED CLUB HOUSE
PROPOSED INSTITUTE OF MANAGEMENT
HOSTEL BLOCK
NORTH
SITE LAYOUT



An oversized roof, raised fourteen feet above terrace level

shields the inside from inclement weather,

while allowing hot air to escape from the sides.



been provided. Each classroom has two side windows for natural light and ventilation.

'An oversized roof, raised fourteen feet above terrace level shields the inside from inclement weather, while allowing hot air to escape from the sides. The building's public face is a porous polycarbonate skin evoking the metaphor of its industrial neighborhood. The skin is engineered to reduce glare and yet allow the building to be naturally aerated. Recycled materials such as packing material from shipping containers and reengineered sleeper wood from railway tracks have been used.'

The first phase of the building has been in use for more than a year, providing inspiration to faculty and students alike. Pleased with the outcome of this project, which has already won them two awards, the team at Planet 3 Studios hopes that powerful design such as this can affect human psyche and contribute to building a great institution.

Throughout the institute, the designers have used bent, warped and tilted walls to give a unique look.