



# THE **ace** BULLETIN

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## GREEN CHECK-IN



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# GEMS SCHOOL

## “A SCHOOL IN THE LAP OF NATURE”

In a day and age where wide open spaces are hard to come by, Prof. Charanjit Shah pushed the envelope of GEMS school nurturing students in a beautiful green campus right in the heart of the smart city, Kochi. The school's approach to learning is one which focuses not only on academic excellence but also in helping students develop their character, creativity, values, personal leadership and the spirit of enterprise necessary for them to achieve their full potential as global citizens and leaders of the future.



**Bird eye view of the entire school campus- “Growing up in the Greens.”**

The trust to pioneer the art of putting this philosophy into an architectural marvel was annexed to the Creative group. The founder principal, Prof. Charanjit Shah's keen interest in academics inclined him towards this project and Ar. Gurpreet Shah, pioneer in sustainable infrastructure design further weaved his academic knowledge with the design which holds a unique strength to establish and rediscover the etiquettes of proper education and go beyond what an environment can offer naturally.

Kochi being one of the most important cities of Kerala excels in the literacy rate of the whole state. Hence, the GEMS School adds to the laurels of the state by being the first and the only school being built in the smart city of Kochi.

Kochi is a seaside town just 10 degrees north of the equator. Hence, it is a moderately hot and humid place round the year. The school's site is envisioned as a natural retreat, planned to focus all viewing angles on the riverfront. The challenge was to balance the use of local materials and traditional construction methods with 'smart' design and technology. The team devised and implemented many smart-simple solutions for designing, starting with the orientation of the building.

Ar. Gurpreet Shah kept the orientation of the school building in the N-S direction to maximize the amount of daylight entering the campus, avoiding direct glare and reducing heat gains by mutual shading.

The architect also overcame the challenging site of the school by incorporating the heavily contoured one side of the site, tapering sharply and flattening towards the river as a design feature. What makes the design unique is the celebration of communal space, light & air with seamless integration of form with nature & surroundings.

Ar. Gurpreet Shah and his team drew heavily on the construction methods & design features of the state, also focusing on the traditional methodology of education patterns and environment for a child individually and then as an ensemble. The atmosphere should make the children happy and be conducive in bringing out their potential. Keeping this ideology in mind, the architect follows an unconventional approach of

designing the school amalgamating the comforts of home in an institutional campus. The school is conceptualized by considering all senses of smell, touch, feel, hear & vision for a child trying to find his entire world in the school. Watching with the vision of a mother coming from the traditional backgrounds of Kerala architecture and education, teaching a child in the central courtyard with natural play of light and wind flow is found in the vast profound of the school.



**Central Courtyard Planning in accordance with traditional ideologies of Kerala Architecture**

The hollowed out space scooped out from the building's central mass allows the hot air to escape creating convection currents of natural winds cooled by the surrounding green barrier and the river.

Based on the idea of creating an entity with soft subtle touches and imbibing a sense of elegance, the design blends together the different functions within each block, translating dramatic key spaces into classroom grids. The large airy classrooms let the children take in the panoramic view of the surroundings. Each building block caters to different age groups accommodating different mindsets. The primary, secondary & high school; are the three buildings connected through passages and walkways which interchange directions to break the monotony of movement.



**PARENT RECEPTION-  
MODERNIST CURVATURE  
BUILDING**

The father figure block i.e.; the parent reception building is of welcoming nature inviting the child & the guardians to the family. The modernist structure with circular lines represents nature in the form of a flower. It consists of a large central hall representing an embassy building; the foremost active space is completely free of columns. The key feature of the naturally lit circular reception block is the view to the large span campus for a visitor without any visual barriers predominant by provisions of high performance glass on the façade.





### **Reception building's interior features reciprocating the exterior**

Blending nature with interiors, the architect has provided a water feature in the reception lobby which highlights the serenity of the river and integrates nature with built up by providing a stimulating environment.



*"CLANGOUR OF CRAFT"*

*"THE BEAUTY OF THE DESIGN LIES IN ITS OPENNESS AND UNRESTRAINED SPACES."*

### **View of the school campus from the river side.**

Amidst the clean grey walls, the serene water body, and modern landscape, there are play zones which reflect the energy of students who are looking to create ripples within the otherwise structured education imparting environs. They are like the bubbles of ideas juxtaposed to the sometimes constraining and rigid fabric of education. The practice courts on the terrace are well placed by applying the space optimization fundamentals incorporated by Ar. Gurpreet Shah. The tennis court is carefully placed at one end of the site for extensive concentration & no distraction. The basketball court doubles up as an assembly space placed between the reception and the library.

The library is a blended academic and social space. Along with the philosophy of education, the library here promotes a search for knowledge conducted with a spirit of free inquiry accentuated with an unrestricted view of the river.



*"SPACE IS THE BREATH OF ART."*

*"FLUIDITY OF SPACE LIKE A MAZE."*

imagination, ideas, and the self. The vernacular design language of the traditional Kerala architectural style is conveyed by the architect's visual, providing sloped roofs that are in keeping with the climatic challenges of Kerala was the way to go.

Ar. Gurpreet Shah's cautious design efforts, segregates the vehicular traffic from the campus. The school campus is pedestrian friendly for extemporizing the acts of play by children.



*"CONCOCTION OF THE NEW WITH THE OLD"*

### **Building skin- caper of attributes**

The building keeps the tradition of jaali work alive, reminding the students to embrace the new and advanced, while staying true to their self and tradition. The screens act as a vertical extension of building's open courtyards. Standing tall, these screens cut the sun glare, protecting the building, in the process creating those ever-changing patterns over the blank elevation walls reminding the users every day that nature paints the most exquisite landscape as long as we can provide a suitable medium to do so. These screens are not just an aesthetic treat that cast interesting shadows and play with light, but of functional importance.

What fundamentally stands out in the entirety is the interaction between the students, the space and its functional usage. The contoured site is further highlighted with the addition of timber trail which is not only a relaxed conventional place but a visitor's delight. The interiors and architecture combine to form a system which combines minimum yet sensible inventory, strategically with the available and existing resources to yield efficiency in terms of space utilization and diversity in terms of character.

Syncopating the emotive experience, the child experiences a continuum of youth advancing from the primary, secondary to high school around the tranquility of natural surroundings scripted by the architect. During this journey, she senses the wide welcoming nature of the school by experiencing each part of the campus from the mounting valley to the splashing pool of the secondary school and finally to the pivotal block of administration traversing through the gleaming exteriors of the activity blocks. The wave continues with the connecting bridges soaring over the central assembly spaces to the classrooms with a clear undistracted view of the river.

***Creative group's institutional endeavor is a smart premier of architecture in a smart city.***

*Courtesy - Creative Group*