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23rd Architect of the Year Awards

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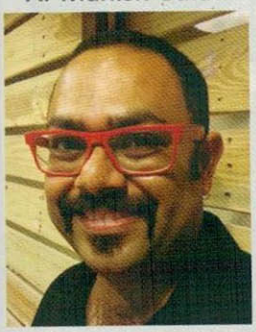
ITM School of Business, ITM Universe, Gwalior

23rd Architect of the Year Awards

Ar Manish Gulati



Manish is an alumnus of School of Architecture, CEPT Ahmedabad. He started his practice in 2002 in New Delhi. His practice from the beginning reflected his clear approach to design - contemporary, bold and global with subtle regional / contextual interventions to concepts. His innate ability to remain abreast with technology, his deep love for the arts and sensitivity towards life always remains at core to any of his works. He has over 14 years of work experience working on institutional projects, sports infrastructure, hospitality, residential and retail. His past and current assignments include NIFT Kangra Campus, HP; DPCC Head Quarters, New Delhi; NIWS Campus Goa; ITM Campus, Gwalior and Sports Academies for Directorate of Sports and Youth Welfare, Hospitality and Retail projects, etc. His forte and driving passion till date remains design and innovation. Majority of the projects in MOFA have been won and commissioned under him as a result of design competitions. His design process is supported by his holistic approach towards architecture in terms of constant research, resolution, analysis, case studies and project discussions.

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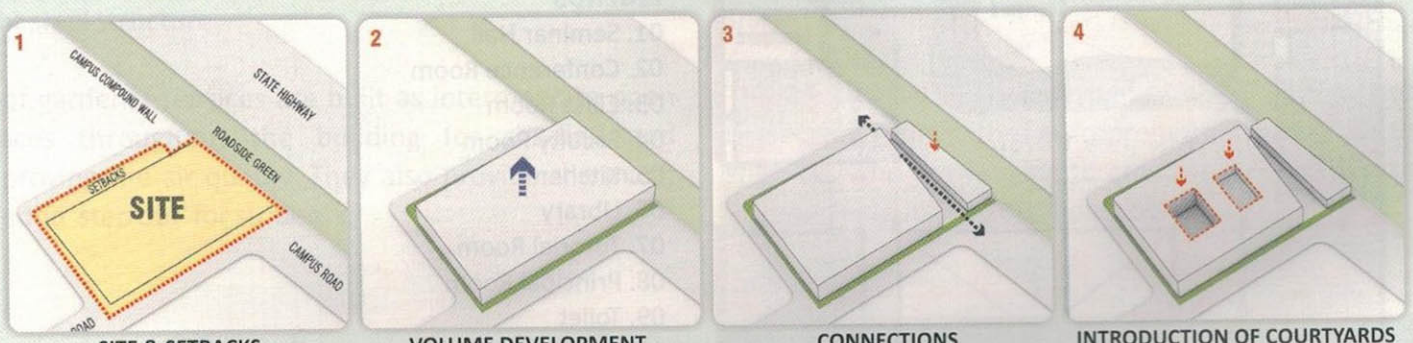
The design response being an institutional building of a business school in a hot city like Gwalior was to build a structure which is both economical and green.

The outside walls of the main building of the business school's campus reflect tradition blended with modernity. The use of locally-sourced Dholpur sandstone for these external walls relates it to Gwalior's architectural heritage.

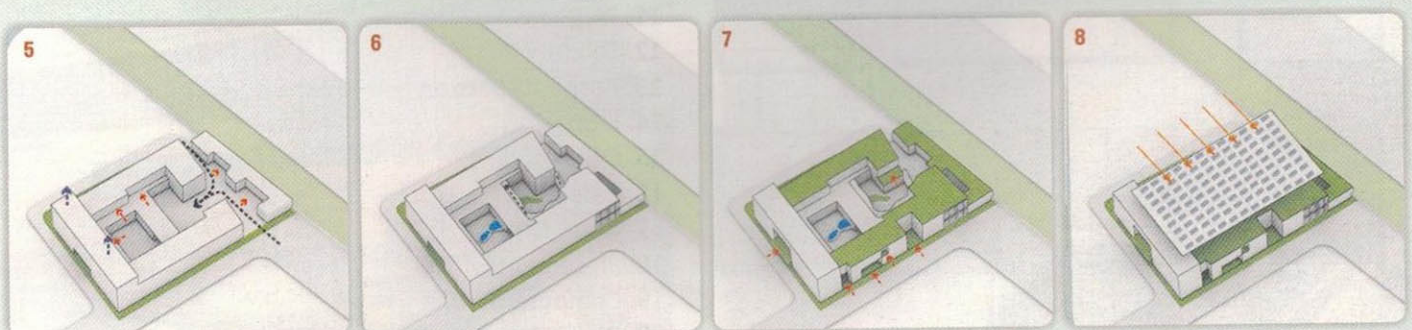
Climatically, Gwalior has a sub tropical climate with hot summers and humid monsoons. That's why the parasol roof, the jaalis and the courtyards along with its orientation make the architectural response to the elements very apt and green.

Because of budgetary constraints, the choice of materials was important. Also this led to ingenious detailing and adaptations. Since modern construction materials and techniques were not widely available hence, indigenous adaptations were worked out to integrate traditional building practices.

To keep high temperatures at bay and lowering air-conditioning costs, building's parasol roof helps. The roof provides a sense of relief to the inhabitants and makes the ITM School of Business a truly green building.



SITE & SETBACKS | VOLUME DEVELOPMENT | CONNECTIONS | INTRODUCTION OF COURTYARDS



VOLUMETRIC MASSING: CIRCULATION | RAMP, WATER BODY & GREEN COURTS | GREEN COURTS & ROOF GARDENS | PARASOL ROOF - HARVESTING RAINWATER & SOLAR ENERGY

Due to building's open centre, the building's hot air rises to the top and collects there. The open parasol roof allows the hot air to escape creating convection currents and a natural air-cooling system. Adding to this natural cooling system is the greenery in and around the building.

Fig 2: First Floor Plan

Fig 3: Ground Floor Plan

LEGENDS

01. Seminar Hall
02. Conference Room
03. Class Room
04. Faculty Room
05. Kitchen
06. Library
07. Tutorial Room
08. Principal Room
09. Toilet
10. Examination Officer Room
11. PA Room
12. Security Room
13. Accounts Section
14. Store
15. Office
16. Cafeteria
17. Dept. Office
18. Placement Office
19. Computer Room
20. Boyt's Common Room
21. First-Aid

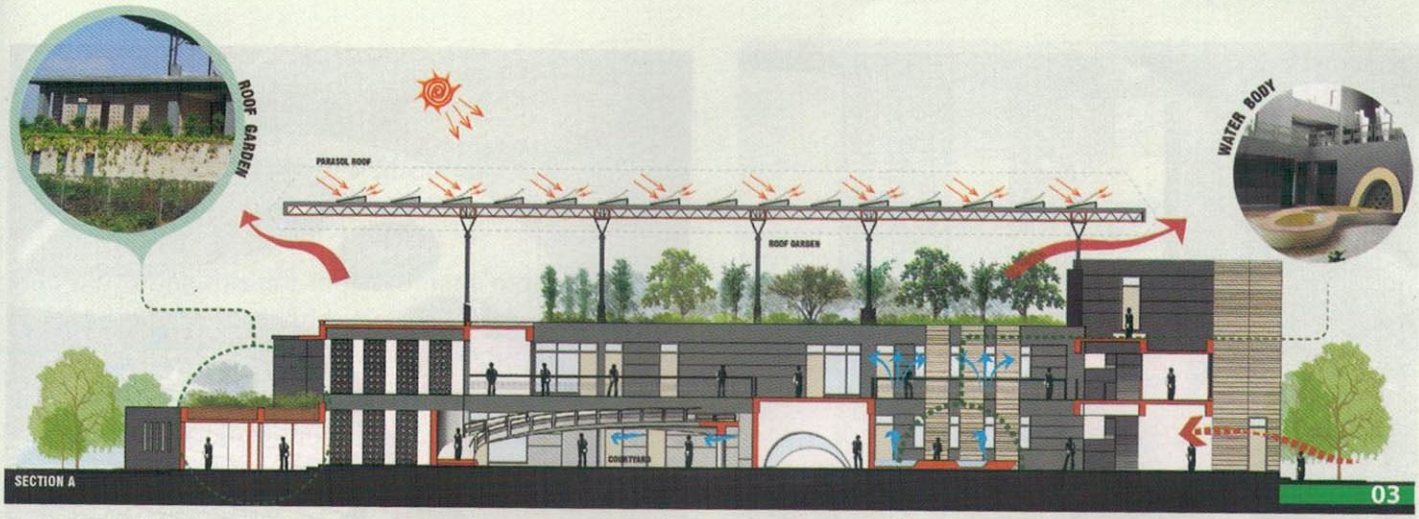


Fig 4: West side Elevation

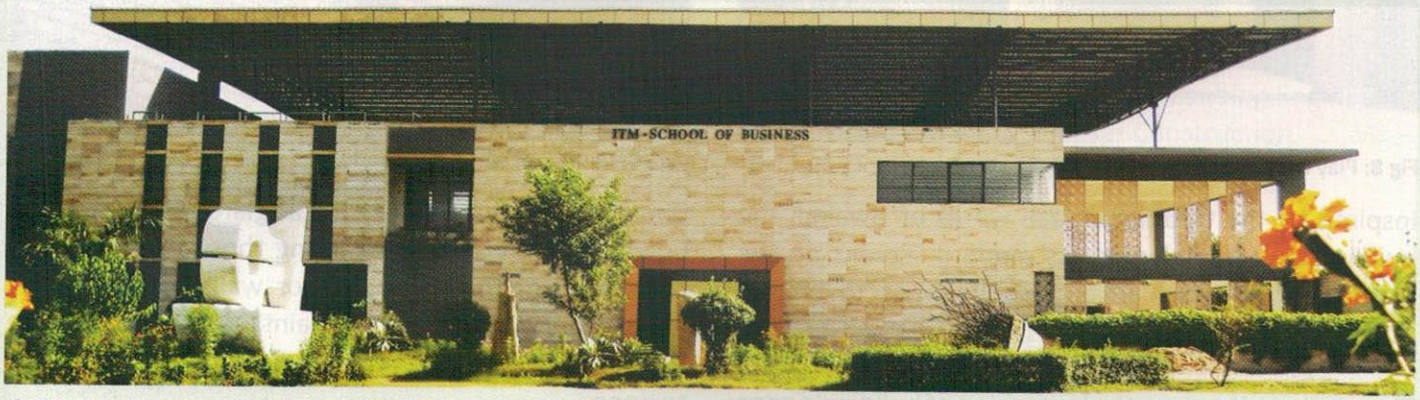


Fig 5: Entrance- external facade in sandstone cladding & modern interpretation of Gwalior Jaalis with front facade Dholpur stone & steel parasol roof

Light weight steel parasol roof: was part pre-fabricated and the rest assembled on site and hoisted up. It clearly shows the steel trusses and offset it against the rustic finished Dholpur sandstone walls. It emphasises solid heavy walls clad with sandstone rising up to the new age light steel structure.

Roof gardens/ terraces are built as intermediate open spaces throughout the building for shading and improving the air quality. They also provide the much needed 'step out' for students.

Behind the solid mass created by the traditional Dholpur clad walls lies a fluid interior space that flows in from one court of the building to the other. The ground level is built on the principles of the traditional Indian courtyard and provides students with a large open space in the centre.

The clean grey walls, the water body, and modern landscape reflect the entrepreneurial spirit of the students who are looking to create ripples within the otherwise structured business environs.

Fig 6: Side Elevation

Fig 7: Stainless steel structures with lights

Fig 8: Play of light and shadows through stone jaali

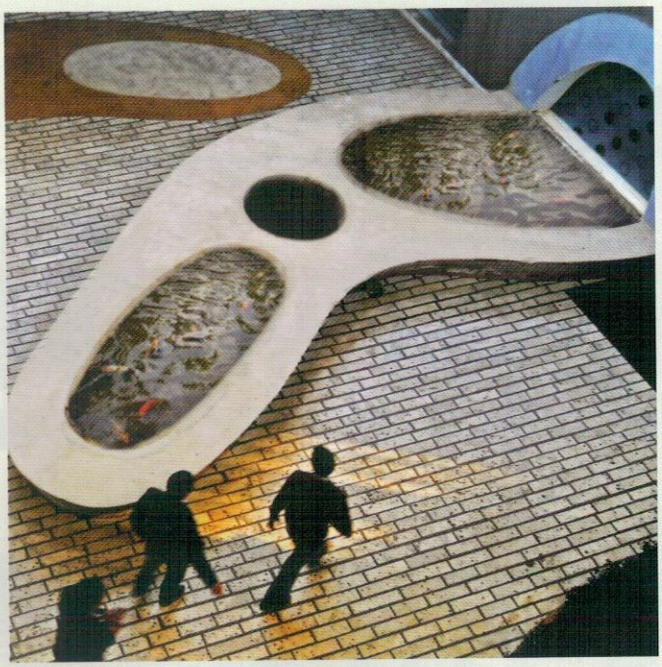


Fig 10: Courtyard with water body

Inspired by the traditional Jaali works of Gwalior, the building uses this element as modern screens on the south western side, which also happens to be the double height entrance space.

The screens act as a vertical extension of building's open courtyards. Standing tall at six metres and facing west, these screens cut the harsh sun glare, protecting the building, in the process creating those ever-changing patterns over the blank interior 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.

Fig 9: Staircase as a landscape element

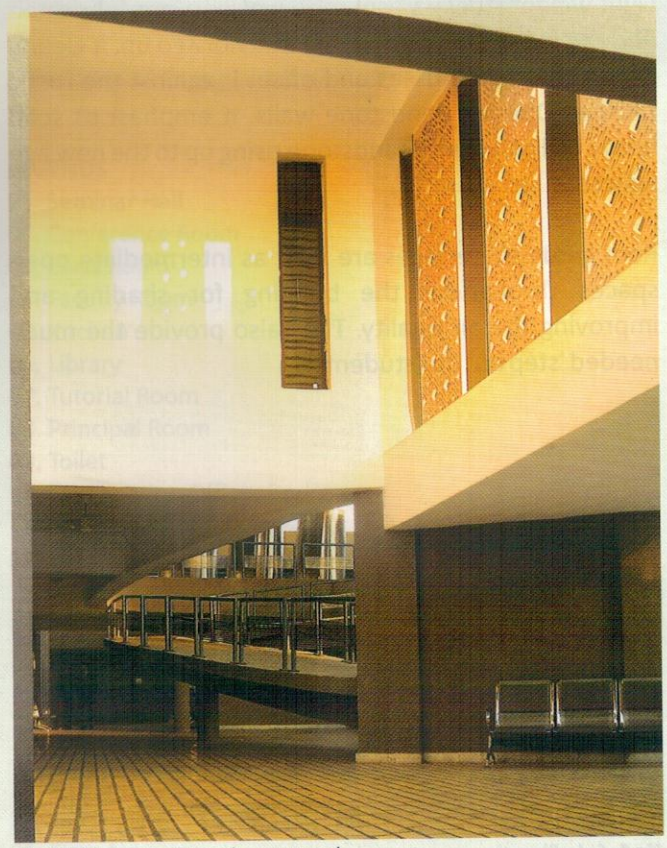


Fig 11: Stone Jaali work courtyard

Orientation of the building helps in harnessing both the north western winds prevalent in Gwalior as well as adequate diffused daylight to naturally ventilate, cool as well as minimize the use of artificial light during the day time.

Also bolstering this are the automatic motion sensors, self dimmable ballasts and smart lighting system.

The parasol roof and window overhangs are lined with photovoltaic cells to generate electricity that is stored in the batteries to run the outdoor lighting after sunset.

The depth of the overhangs and the roof is designed as per the sun direction and penetration so as to keep a balance between the availability of natural day light inside the office throughout the day yet not increasing the ambient inside temperature.

The roof collects and takes the water to the rainwater recharge well.

Fig 13: Internal courtyard

PROJECT DETAILS

Built up Area	:	3,717 SqM
Associated Architects	:	A Chaudhary, P Mahajan
Struct. Engineers	:	Roark Consulting Engineers
Civil Contractors	:	Kesar Construction
Project Duration	:	2009-2011
Project Cost	:	₹.6 Crores

Fig 12: Ramp - Internal courtyard