

ARCH O PLAN

Newsletter From Department of Architecture and Planning

ABOUT THE DEPARTMENT

The Department of Architecture and Planning at the Indian Institute of Engineering Science and Technology, Shibpur has a long and rich history. Shortly after Independence, in 1949, two sister Departments were established at the erstwhile Bengal Engineering College, that is, the Department of Architecture headed by Mr. G K Paknikar, and the Department of Town and Regional Planning headed by Mr. Abani Kumar De. The former offered the first 5-Year undergraduate degree in architecture of the country (Bachelor of Architecture- B.Arch.), and the latter offered the first 2-Year postgraduate diploma in town and regional planning of the country (Diploma in Town and Regional Planning- DTRP). Later, in October 1952, the two departments merged to form the Department of Architecture, Town and Regional Planning headed by Mr. Joseph Allen Stein, the renowned American architect, who left his indelible mark on the post-independence architecture of India. The DTRP programme subsequently became a full-time course in Master of Town and Regional Planning (MTRP) in 1975. In 1919, responding to the requirements of the present times, the postgraduate programme was upgraded to Master of Planning (specialization in Urban and Regional Planning). This was done to broaden the horizon of the Department in terms of academics, research, and employment opportunities for students. Accordingly, the Department was rechristened as the Department of Architecture and Planning on 06 Dec 2022.

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NIRF 4th



EDITORIAL TEAM

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April-September-2024

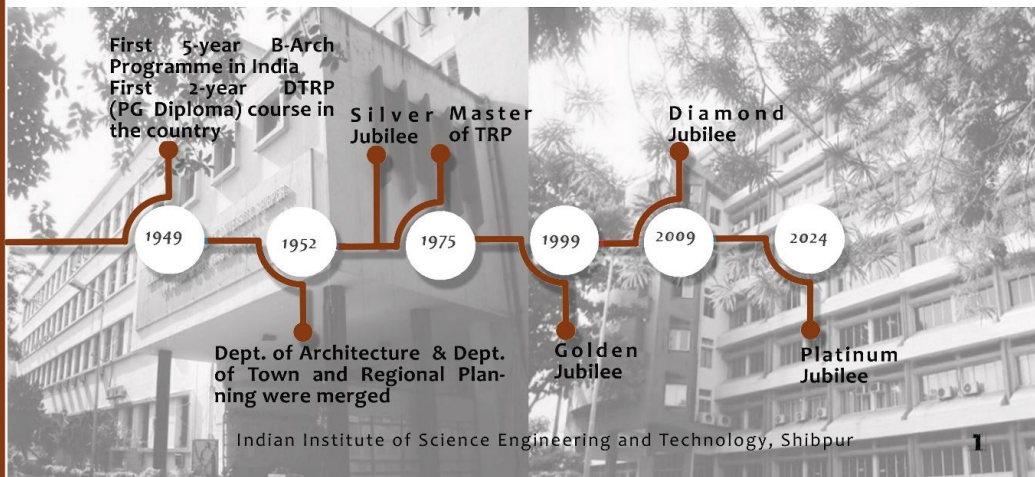
FROM THE HEAD'S DESK

We are stepping into an auspicious moment of celebrating the 75th year (Platinum Jubilee) of the Department of Architecture and Planning. This is our immense pleasure that we are inaugurating the first departmental newsletter (January 2024 – October 2024) during the celebration days.



Since, Architecture in graduation and Planning in post-graduation, both are the two arms of our Department, 'Arch – O – Plan' was thought to be the continuing name of the newsletter. This will showcase the events, creativity and achievements of the departmental stakeholders bi-annually through research, publications, awards, documentations and other recognitions.

Department of Architecture and Planning, IIST Shibpur has achieved 4th position in NIRF (National Institutional Ranking Framework), 2024. The department has been in top 10 Architecture and Planning category since the past five years: ranked 4th in 2024, 10th in 2023, 6th in 2022, 9th in 2021 and 6th in 2020.



PUBLICATIONS

JOURNALS

- A Narendr, B H Aithal, S Das, A data-driven framework for enhancing coastal flood resilience in re-source-crunched developing nations, 15(1), 2396892, Geomatics, Natural Hazards and Risk, 2024
- A Gupta, B De, AK Shukla, G Pignatta, Vulnerability Assessment of a Highly Populated Megacity to Ambient Thermal Stress, 16(8), 1-21, Sustainability, 2024
- Chauhan, A., Roy, S. & Kundu, A. Assessing sediment dynamics and retention services in the vulnerable mountain ecosystem of the Indian Himalayas. Environ Monit Assess 196, 928 (2024).
- Dey Mallika, Gupta Aman, De Bhaskar, Das Sutapa, Improving accessibility to urban blue-green spaces: A case of Howrah, India, Sustainable Development and Geospatial Technology - Volume 1: Foundations and Innovations, C. Sharma, A. K. Shukla, S. Pathak, & V.P. Singh (Ed.), Springer Nature, 2024
- Gupta Aman, Sadab Anisha, De Bhaskar, Assessment of critical thermal characteristics and land surface dynamics of an Indian metropolitan city, 15 (7), 3409–3430, Journal of Water and Climate Change, 2024.
- Gupta Aman, De Bhaskar, Enhancing the city-level thermal environment through the strategic utilization of urban green spaces employing geospatial techniques, 1-19, International Journal of Biometeorology, 2024.
- Gupta Aman, De Bhaskar, A systematic review on urban blue-green infrastructure in the south Asian region: recent advancements, applications, and challenges, 89, 382-403, Water Science and Technology, 2024.
- Vinod, V., Sarkar, S. and Roy, S., 2024. An Overview of Key Indicators and Evaluation Tools for Assessing Economic Value of Heritage Towns: A Literature Review. Journal of The Institution of Engineers (India): Series A, pp.1-9.

PROJECTS

Project Title	Funding Agency	Investigators	Year
Declaration of Nabadwip as Heritage Town	Urban Development and Municipal Affairs Department, Govt. of West Bengal	PI: Prof Aditya Bandyopadhyay	2017 (ongoing)
UKRI GCRF Living Deltas Hub sponsored by UKRI-RCUK and coordinated by Newcastle University, UK	UK Research and Innovation -RCUK	Dr. Souvanic Roy and Dr. Manas K. Sanyal	2019 (ongoing)
Preparation of bid document for the proposed ‘Green Field City’ under 15th Finance Commission, Government of India, within Sector-VI Industrial Township Authority at Bantala, District: 24 Pgs. (South)	Sector VI Industrial Township Authority, West Bengal	PI: Dr. Tuhin Subhra Maparu	2022 (ongoing)
Literature review, market and industry survey, and performance assessment of different type of hinges used in doors and windows (a builder’s hardware) manufactured and/or available in the Indian market.	Bureau of Indian Standards, Government of India.	Dr. Bhaskar De (Co-PI) [Dr. Neelam Rani (PI), NIT Jalandhar]	2024 (ongoing)

CONFERENCE

- Das, S. (2024). Mission LiFE: Going beyond energy efficiency of smart cities. In AIP Conference Proceedings (Vol. 3209, No. 1). AIP Publishing.
- Dey, M., Gupta, A., De, B., & Das, S. (2024). Improving Accessibility to Urban Blue-Green Spaces: A Case of Howrah, India. In Sustainable Development and Geospatial Technology: Volume 1: Foundations and Innovations (pp. 257-278). Cham: Springer Nature Switzerland.
- Ghosh, S., Mukhopadhyay, P., Mitra, S. & Nayak, S. (March 2024). 'Impact of Disasters in shaping the Vernacular Architecture of Coastal Area'. International Conference on Rethinking Built Environment, Mizoram, India. Received 'Special Mention Award'.
- Patra, S., Nayak, S. & Paul, S., K. (March 2024). 'Exploring Green Design Features Contributing Towards Form and Iconicity of Tall Building'. International Conference on Rethinking Built Environment, Mizoram, India.
- Mitra, S. The Dynamics of Youth Activism in Contemporary India: Catalysts and Challenges, 13th EuroSEAS Conference at the University of Amsterdam, The Netherlands, 2024.
- Nayak, S., TVSS, S. & Mitra, S. (March 2024). 'Investigating Efficiency of Courtyard Designs in Western Indian Havelis', International Conference on Rethinking Built Environment, Mizoram, India
- Sarkar, S. Economics of Spatial Configuration: a conceptual framework for tenanted decision of planned shopping mall, presented at International Conference of Rethinking Built Environment, 2024, Mizoram, India.
- Sarkar, S. Sustainable Urbanisation: Development of a resource allocation strategy for Urban Management, presented at the International Seminar on New Era of Social Responsibility,



- The department had organized a Masonry workshop on Brickwork at the 'Construction Yard' of the Institute on 13th March 2024 to provide hand-on learning to the students in construction process and enable them to understand the best practices and challenges faced.
- Invited Lecture on Landscape Architecture and Site Planning by Ar. Sujay Das, May 2024.
- Invited Lecture on Building services and MEP coordination Ar. Subrata Ghosh, May 2024.
- Invited Lecture on Architectural Design and Building Services Dr. Soumyendu Biswas, May 2024.
- An Invited Lecture on 'Hospital Services and application in real life projects' was conducted for the students, in the 4th year studio, from 10.30am to 1.30pm, on 8th August 2024, by Ar. Malay Kumar Ghosh and Ar. Sukanta Konai.
- Workshop on Solar Passive Architecture and Thermal Comfort on 17-18 August 2024.
- Invited lecture on 7th September by alumni Debasish Biswas on "Current Trends and Future Planning Aspects of Cities".
- ITPI-WBRC Academic Excellence Awarding & Guest Lecture Session organized jointly by ITPI-WBRC & IIESTS on 10th September
- NASA Day event organised on 13th September 2024 with invited lecture from Alumni AR. Mehruz Ali on Landscape Architecture and Students Design Competitions.

ACHIEVEMENTS

Student Innovative Ideas awarded in Design Competition:

- Soumik Barua & Gourav Dutta from UG 3rd year had secured 2nd position while, Siddhartha Paul & Apurv Mirgule secured the 3rd position in the 'Go green with INSDAG steel building design competition', at SSTS in 2024.
- Sudeshna Roy from UG 4th year was awarded First prize in the event of 'Sketch Your Inspiration' conducted by the Association of Architects, Assam (AAA), while Apurv Manoj Mirgule and Gaurav Dutta from UG 3rd year received second prize in 2024.
- Award Won by Nathan Joseph, Kazi Unmeelan Islam and Yogita Tripathi in an event on 'Artificial Intelligence in Design and Architecture' Organized by Indian Institute of Interior Designers (IIID)

Best Paper/ Thesis awards from recognized National/ International Bodies:

- Kamal Krishna Pal Chaudhury Best Planning Student Award was awarded to the following students by the Institute of Town Planner, India (ITPI)- West Bengal Chapter: Tuhina Dutta (2024)
- Satya Nath Halder Best Planning Thesis Award was awarded to the following students by the Institute of Town Planner, India (ITPI)- West Bengal Chapter: Sanchita Chanda (2024)
- Urjasee Basak received 'Somenath Ghosh Memorial Award for All-Round Excellence 2024' awarded by Alumni of B. E. College (GAABESU).
- A Special Mention Award was presented for the paper titled "Impact of Disasters in shaping the Vernacular Architecture of Coastal Area", authored by Mr. Sanket Ghosh, a B. Arch. 5th Yr. student, Prof. P. Mukhoadhyay, Dr. S. Mitra, and Dr. S. Nayak, in InCorBE 2024: an International Conference on Rethinking the Built Environment, held at School of Fine Arts, Architecture and Fashion Technology, Mizoram University during Mar 6-8, 2024.

Outreaches and Award

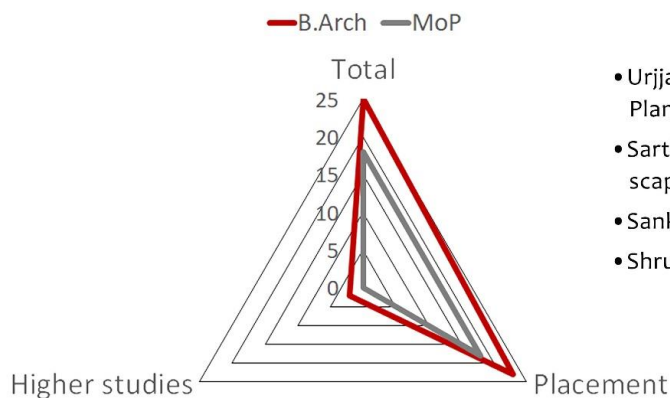
- Abhishek Rao selected as a Next Gen Candidate 2025 with \$6500 funding, to attend Getting to Zero Forum, 2025 by New Buildings Institute (NBI) at Los Angeles, CA scheduled on 22nd - 24th of April, 2025. This programme intends to enhance sustainable capacity building.
- Abhishek Rao served as a member of Jury at Inspireli Awards 2024, Prague, CZ.
- Abhishek Rao presented a poster - on 'Mahananda's Malaise: Investigating Water Pollution Origins and Environmental Aftermath in Siliguri, West Bengal, India' at AAEEES Summit on Evidence-informed Practice: Translating Research into Practice to Solve Cross-cutting Challenges moderated



PhD AWARDEE

- Arpita Mukherjee | Title : **'Impact of Metro Rail Extension on Land Use and Land Value Around Selected Stations - Case Study Kolkata'**, under the guidance of Dr Keya Mitra.
- Aditee Prabhakar | Title : **'Application of System's Approach for patial Planning of Human Settlements- Case of India'**, under the guidance of Dr. Aditya Bandyopadhyay.
- Anubhav Chatterjee | Title : **'Development of An Integrated Framework For Urban Water Sustainabilty'**, under the guidance of Dr Swati Saha.
- Nasibul Alam | Title : **'Vulnerability Assessment of Settlements on Gangetic Alluvial Flood Plain Along River Course'**, under the guidance of Dr Swati Saha.
- Reshma Chakraborty under the guidance of Dr Keya Mitra.
- Subha Chakraborty | Title : **'Implications of Changing Socio-Ecological Relationships along Mangrove-dominated CoastalS tretches of Andaman Islands, India'**, under the guidance of Dr Swati Saha.

HIGHER STUDIES



- Urjjasee Basak pursuing masters in City Planning from IIT Kharagpur
- Sarthak Sethi pursuing masters in Landscape Architecture from SPA Delhi
- Sanket Ghosh working at Larsen Toubro
- Shruti Sharma working at SYSTRA India

PLACEMENT



Architectural thesis | highest grades secured by Urjjasee Basak under the guidance of Dr Soumen Mitra. Her thesis was titled: **Children's Centre for Creativity**

Planning thesis | highest grades secured by Sanchita Chanda under the guidance of Prof. Souvanic Roy and Prof. Keya Mitra. Her thesis was titled : **Comparative Study of Urban Morphologies For Urban Heat Island Mitigation Plan- Case Study Kolkata.**

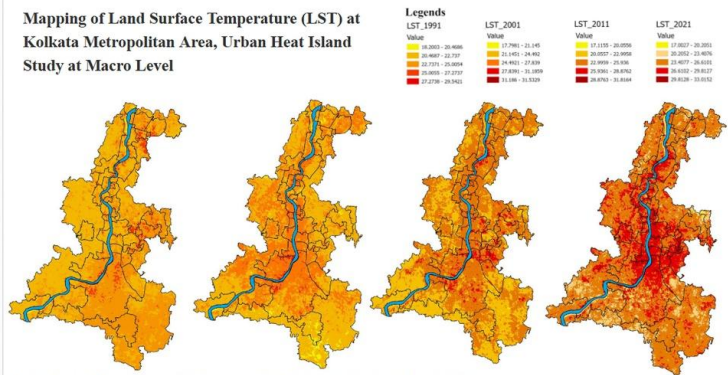
THESIS



ARCHITECTURAL THESIS

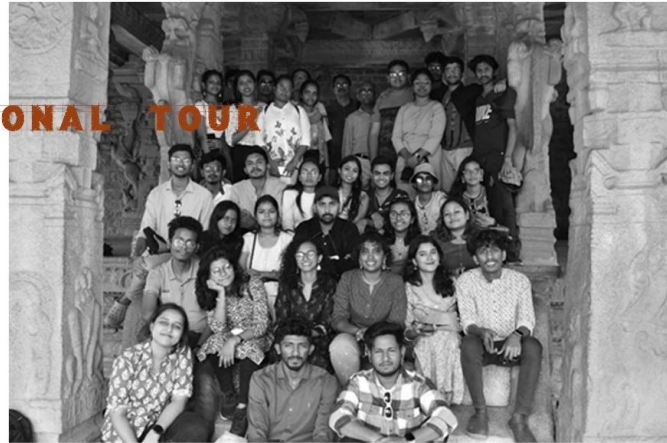


Mapping of Land Surface Temperature (LST) at Kolkata Metropolitan Area, Urban Heat Island Study at Macro Level



Source- Developed by author(2022APM001) using remote sensing images on Google Earth Engine(GEE).





PLANNING FIELD-TRIP





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