

### Council of Architecture's International Conference

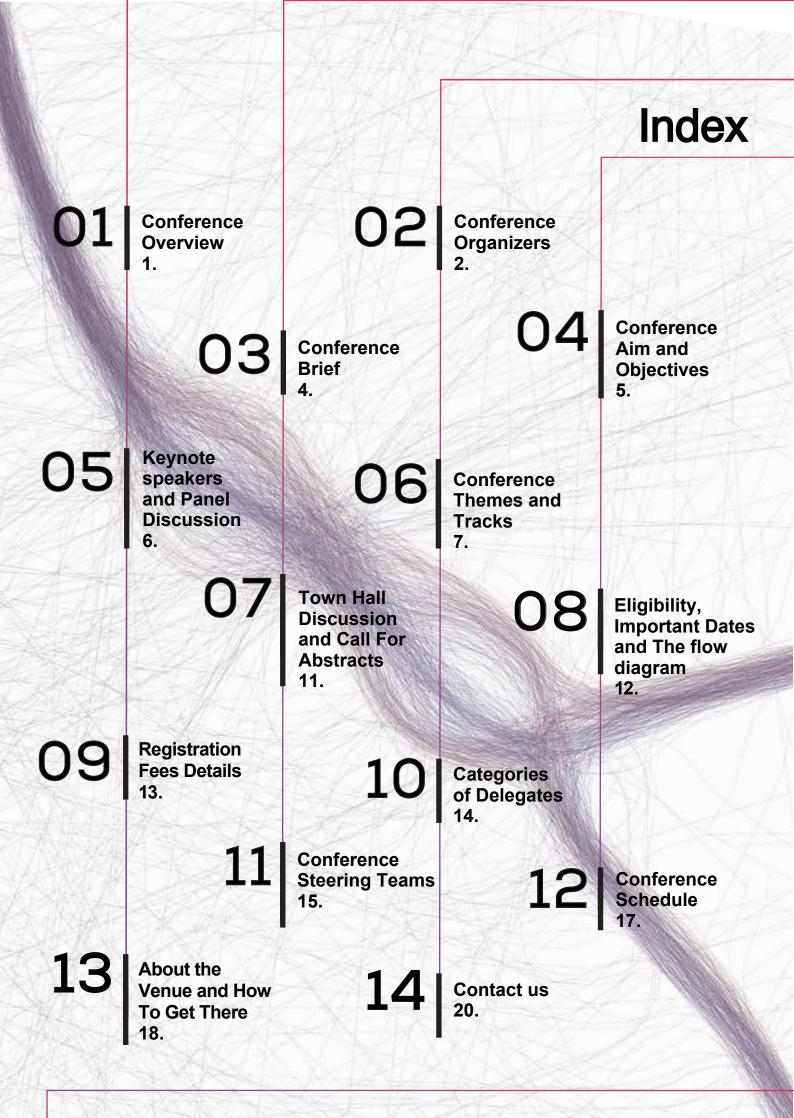
DY Patil Deemed to be University School of Architecture Navi Mumbai





#### TRANSFORMATIONS 2025 Co-scripting Change with Disruptive Technologies in Architecture, Design and Urbanism

Centre of Excellence, DY Patil Deemed to be University, Navi Mumbai.



### **Overview**

# TRANSFORMATIONS 2025

# Co-scripting Change with Disruptive Technologies in Architecture, Design and Urbanism.

In the fields of architecture, urbanism, and design, disruption represents significant, unexpected changes driven by groundbreaking innovations and transformative technological advancements. Historically, such breakthroughs continuously advanced these domains, influencing have both the built environment and broader societal directions. Disruptive technologies inherently have the power to deeply change existing patterns in the built environment. They create paradigm shifts in design thinking and practice, challenging established norms and promoting innovative solutions to complex challenges.

This transformative potential highlights the need for a dedicated conference to explore these phenomena. The idea is to come together and collaborate with research and innovations towards a sustainable future enriched by disruptive technologies.

The Council of Architecture envisions this conference as a platform to facilitate discussions between academia and industry, fostering continuous reforms in pedagogy, scholarship, and practice.

### Organizers





The Council of Architecture (COA) is an autonomous statutory authority under Ministry of Education, Government of India, set up under the Architects Act, 1972, enacted by the Parliament of India. The Architects Act provides for registration of Architects, standards of education, recognized qualifications and standards of practice to be complied with by the practicing architects. The Council of Architecture is charged with the responsibility to regulate the education and practice of profession throughout India besides maintaining the register of architects.

Council of Architecture, being the competent authority for the purpose of fixing norms and standards for architectural institutions and having the necessary expertise holds the National Aptitude Test in Architecture (NATA) at national level to provide a single window system for appearing in aptitude test and to facilitate institutions, students and public at large for admission to First year of 5 year B.Arch Degree Course at all recognized Institutions all over India.

The Council is conducting design Competitions on behalf of various authorities of Govt. of India. The Training and Research Centres of COA, internationally recognized as one of the foremost multidisciplinary Institutions in the field of architecture education, research, training and service have been conducting Documentation, research and Publication initiatives for the architecture fraternity, Training Programs for architect professionals and educators, Awards Programs and for the undergraduate and post graduate students of architecture and Capacity Building Workshops.



DYPATIL UNIVERSITY school of ARCHITECTURE

The D Y Patil School of Architecture, Nerul, Navi Mumbai established in 1992, has a legacy of 30 years in the field of architectural education and runs under the ambit of DY Patil Deemed to be University, Nerul, Navi Mumbai with the NAAC accreditation of 'A++' Grade. Ever since its inception, the school has been exploring studies in diverse domains of Architecture viz. Urban design and Planning, Building Sciences and Technology, Architecture History, Theory and amp; Criticism and Arts - Crafts- Design. The spheres of enquiry have been ever expanding to reach out to current global scenarios, contemporary practices and major shifts on technology.

The school has now set out to take great strides in revolutionizing teaching and learning processes, developing new pedagogies under the Visionary leadership of the Honourable Chancellor Dr. Vijay D. Patil. To foster innovation and new knowledge, the school has also strategized to focus on two primary discourses of societal development and their interrelationships, one that of indigenous arts and crafts, and the other being emergent disruptive technologies as the way ahead. To do so a dedicated setup in the form of a state-of-the-art DY Patil Center Of Design (D'COD) with multidisciplinary Labs and Studios spaces has been envisaged, and set up to empower the faculty and students to innovate, experiment and collaborate with various disciplines as well as the industry.

# Conference Brief

Within the domains of architecture and urbanism, the idea of disruption denotes profound, unforeseen change brought about by powerful forces like path-breaking thought innovations and norm-changing technological advancements. From the earliest known histories of architectural practice to present day narratives, technological breakthroughs have continuously and steadily propelled the profession forward, shaping not only the built environment as a result but also the larger societal trajectory as well.

Prominent examples, for instance, include new building types like shopping malls that emerged in India during the late 20th century and disrupted traditional bazaars and associated shopping habits as well as cleverly conceptualised spatial typologies such as planned neighbourhoods that disrupted traditional city living centred upon Wadas and Mohallas.

Important to note disruptive technologies are characterised by their intrinsic capacity to fundamentally alter the traditional patterns characterising the built environment before their advent. In this respect, they induce paradigm shifts in design thinking and practice, challenging conventional norms and fostering innovative solutions to complex challenges.

Turning the focus upon technological advancements, the aim of this conference is to stimulate discussions that uncover the transformative impact of disruptive technologies upon the landscape of Architecture, Design and Urbanism. By exploring and learning together how technological advancements have shaped the field in recent past, as well as their potential impact upon foreseeable future per ongoing trends, we hope the conference participants will acquire insights into how to navigate and utilise these disruptions to help co-create urban futures that are more sustainable, just, and resilient than the past.

# **Conference Aim**

The aim of this conference is to stimulate discussions revealing the transformative potential of disruptive technologies in redefining architecture, urbanism and built and unbuilt landscapes.

# Conference Objectives

#### **Analysing Impacts of Disruptive Technologies:**

Assess the profound impact of disruptive technologies on physical environments and socio-cultural realities reshaping our built and unbuilt landscapes.

### Examining the Role of Innovation in employing disruptive technologies for sustainable development:

Delve into the role of innovation in navigating and utilising changes caused by disruptive technologies to create more sustainable, equitable, and resilient urban futures.

#### Foster Collaboration and Knowledge Exchange:

Facilitate interdisciplinary discussions and collaborations including but not limited to art, architecture, design, urban studies, engineering, economics, sociology, philosophy, political science, healthcare and law. Catalyse knowledge exchange among researchers, practitioners, policymakers, and industry professionals.



# Keynote addresses and lectures by eminent speakers on:

- Foundations of Disruptive Technologies in Architecture and Urbanism and Historical perspectives on technological disruptions in architecture.
- Theoretical frameworks for understanding disruptive technologies in urban design.
- Case studies of early disruptive technologies in architecture and urbanism
- Envisioning the Future: The Dynamic Relationship Between Architecture, Urbanism, and Disruptive Technologies

# Panel discussion:

The inaugural day of the Urban Futures 2024 conference will culminate in a Panel Discussion featuring a distinguished moderator alongside our eminent speakers and guests of honour. This forum will delve into the profound impact of disruptive technologies on the evolution of architecture, urban planning, and both physical and conceptual landscapes, laying the groundwork for further exploration on the second day of the conference.

Our primary objective is to create an environment that encourages inclusive dialogue and active participation, fostering meaningful exchanges and catalyzing collaborative action. By leveraging these discussions, the conference aims to drive positive societal transformations through the strategic use of disruptive technological advancements.

### **Themes and Tracks**

# **THEME 1:** Disruptive technologies in architecture and urbanism

This track will help locate, situate, and map the idea of disruption, along with the agency of disruptive technologies, in shaping the field of design on the terrain of architectural history and theory. What lessons can we learn from influential past precedents?

Track 1: Evolution of disruptions and disruptive technologies as catalysts for change (Indicative list of papers could be, but not limited to)

- Situating the idea of disruption in Architecture
- Situating the idea of disruption in design pedagogy
- Situating the idea of disruption in Urbanism
- Sustainable materials and their role in disruptive construction practices
- Governance and Policy Implications of Disruptive Technologies

#### Track 2: Disruptions, Societal Transformations and Built Form Impacts

(Indicative list of papers could be, but not limited to)

- Social Equity and Inclusive Design
- Community Engagement in Urban Planning
- Health and Well-being in Built Environments
- Cultural Heritage Preservation in Urban Contexts
- Governance and Policy Implications of Disruptive Technologies
- Urban Mobility and Transportation Systems
- Data-driven urban planning and management
- Privacy and security concerns in cities

#### **THEME 2:** Established disruptive technologies: Collaborations and Conflict

This track focuses on well-established disruptive technologies that have already made significant impacts on architecture, design and urbanism. Participants are encouraged to explore the applications, and implications of technologies such as AI, blockchain, augmented reality, and IoTs. Discussions may include studies showcasing successful implementations of these technologies in reshaping the built environments & enhancing urban experiences.

This theme will also help illustrate prominent intellectual positions & notable perspectives in the architectural, design and urbanism fields regarding first-hand experiences with disruptive technologies. For example, in what ways did the advent of CADD (computed aided design and drafting) shape the architectural field in the past three or so decades? For good, better or worse?

# Track 1: Contemporary Disruptive Technologies, collaborative processes and Development of Disruptive Technologies (Indicative list of papers could be, but not limited to)

- From CADD to BIM, disruptions and changes
- · Changes in architectural practice, a narrative through disruptions.
- Advances in 3D printing and its implications for architectural production
- Al and Machine Learning in Design
- Robotics and Automation in Construction
- Virtual and Augmented Reality in Urban Planning
- Digital Fabrication and 3D Printing in Architecture
- Smart Cities and IoT Integration
- Blockchain in Property and Land Management
- Heritage Conservation in Urban Expansion
- Interdisciplinary collaborations

### Track 2: Sustainable Production Practices and Innovations in disruptive technologies (Indicative list of papers could be, but not limited to)

- Renaissance of Art and Craft in the Face of Disruptive Technologies
- Digital Art and Craftsmanship
- Heritage Conservation and Craft Revival
- Digital fabrication and its impact on architectural production
- Mass customization and its role in disrupting traditional / sustainable production methods
- Sustainable production practices in architecture and urban design
- Collaborative and community-based production models
- Integration of traditional craftsmanship with modern production techniques
- Successful Implementation of Disruptive Technologies
- Urban-Rural Linkages and Food Systems
- Interdisciplinary collaborations towards sustainable production practices

#### **THEME 3:** Emerging disruptive technologies: Symbiosis and Sustenance

This theme highlights emerging disruptive technologies that show great potential to transform not just architecture and urbanism but also the way society lives, in the near future. It also seeks to highlight interdisciplinary symbiosis for a resilient future. Participants are invited to examine the latest developments and advancements in areas including, but not limited to nanotechnology, bio-design, generative design, & autonomous systems. Topics may include innovative uses of these technologies in addressing pressing urban challenges, fostering sustainability, & promoting inclusivity. Papers may also induce dialogues on ideations for disruptive technologies working towards Sustainable Development Goals and inter or multidisciplinary collaborations.

### Track 1: Designing for the Future: Vision, Speculation, Challenges and innovation as a response (Indicative list of papers could be, but not limited to)

- Designing for the Future: Transformative (impact) Vision and Speculation
- Innovation and production practices for Sustainable Future
- Future of Interdisciplinary Adaptive Pedagogies
- Digital Tools and Learning Environments
- Experiential Learning and Fieldwork
- Interdisciplinary Approaches in Education
- Design Thinking and Problem-Based Learning
- Pedagogical Strategies for Sustainable Development
- Speculative Design and Scenario Planning
- Future Cities and Imagined Realities
- Ethical Considerations in Speculative Urbanism
- Utopian vs. Dystopian Visions
- Design Fiction and Narrative in Urban Futures
- Role of Architects and Urban Designers as Futurists

Track 2: Multidisciplinary, Interdisciplinary and Transdisciplinary Integrations with Architecture and Urbanism. (Scholars from interdisciplinary or allied fields invited)

#### THEME 4:

Case studies illustrating the employment / influence of disruptive technologies in architecture, urbanism and productions.

This track will be organised in two parts. The first part will feature detailed case studies describing the practical use of recent, emergent technologies like VR, AR, AI, Digital technologies, GIS, and the second part will focus on sustainable solutions etc in the fields of architecture, urbanism and production of spaces, as well as the lessons learnt so far. The theme and both sessions will deliberate on the potential of these developments on the impending future. Multidisciplinary and transdisciplinary research will be valuable.

### Track 1: Focussing on Technology (Indicative list of papers and presentations could be, but not limited to)

- Infrastructure Development in Peri-Urban Areas
- Digital fabrication and its impact on architectural production
- Mass customization and its role in disrupting traditional production methods
- Collaborative and community-based production models
- Integration of traditional craftsmanship with modern production techniques
- Successful Implementation of Disruptive Technologies
- Scalability and Replicability of Solutions

### Track 2: Focussing on Sustainability (Indicative list of papers and presentations could be, but not limited to)

- Vernacular Architecture and Sustainable Practices
- Informal Settlements and Participatory Planning
- Sustainable production practices in architecture and urban design
- Urban Agriculture and Green Spaces
- Collaborative and community-based production models
- Integration of traditional craftsmanship with modern production techniques
- Successful Implementation of Disruptive Technologies
- Scalability and Replicability of Solutions

### **Town Hall Discussion**

At the culmination of the Transformations 2024 conference, a Town Hall Discussion will convene, led by chief moderators of all tracks leading the discussions, serving as an open forum for professionals from diverse fields to engage in a comprehensive assessment of the holistic nature of disruptive technologies.

The Town Hall Discussion aims to foster collaborative dialogue and knowledge exchange among attendees, encouraging interdisciplinary interactions and innovative thinking. Participants will have the opportunity to pose questions, share experiences, and contribute to a collective understanding of how disruptive are reshaping our world and shaping future urban landscapes. technologies Through this inclusive and participatory forum, the Urban Futures 2024 conference seeks to facilitate meaningful exchanges and inspire collaborative action towards harnessing the potential of disruptive technologies for positive societal transformation.

### Call For Abstracts

Submit your abstract of no more than 300 words. Please download the given Abstract Template from the link attached. You are requested to follow the format carefully for your abstract submission. Abstracts that do not apply to the correct format will be rejected. The primary language of the conference is English. We encourage you to send an informative abstract (complete abstract) which is a compendious summary of a paper's substance including its background, purpose, methodology, results, and conclusion.

Please submit well before the submission deadline. CLICK HERE to download abstract template

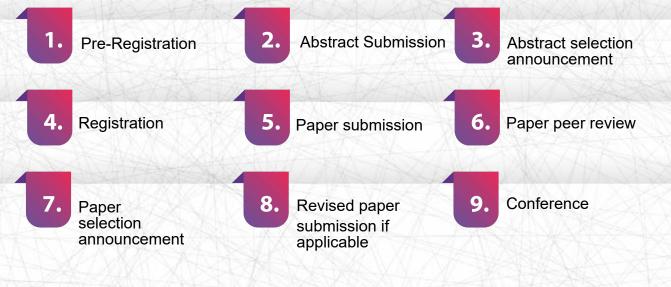
# Eligibility

- Academicians
- Professionals
- Graduates of Architecture
- Graduates of Allied Fields
- Students pursuing Postgraduate studies and above
- Researchers

### **Important Dates**

Brief distribution and abstract call :6th August 2024 Abstract upload opens from: 12th August 2024 Abstract deadline: 1st September 2024 Announcement of abstract selection :10th October 2024 Research paper submission: 15th November 2024 Selection of paper: announcement 2nd January 2025 Revised paper submission: 12th January 2025 Conference dates: 13th - 14th February 2025

### The flow diagram



### **Registration Fees Details**

Registration Details (Fees in INR)	Fees for Indian Delegates (INR)				Fees for Overseas Delegates (\$)			
	Pre Registration	Early Bird	Standard	Delayed	Pre Registration	Early Bird	Standard	Delayed
Primary Author- Oral Presentation- Attend the conference with paper publication	300	3000	5000	7500	150	300	375	425
Additional Paper (same lead author)	200	2000	3500	5250	100	210	260	300
Co-Author	NA	1000	1500	2500	NA	75	100	150
Student Delegate (Author). Attend the conference with paper publication at Student Discounted Rate (Applicable only for students pursuing post graduation degrees or diplomas in architecture or allied fields)	150	1500	3000	3750	75	150	185	215
Poster presentation - Attend the conference with a Poster/Presentation Only - NO paper publication	NA	2000	3500	5250	NA	150	200	300
Attendee	NA	1000	1500	2500	NA	75	100	150
PG Student Attendee	NA	500	750	1000	NA	30	50	75
UG Student Attendee	NA	300	500	750	NA	20	30	45
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#### Note:

- Only primary authors should register for abstract
- Pre-registration fees will be adjusted against the registration fees
- If the primary author of one paper is the co-author of another, they need not register again as co-authors
- A discount of 30% of registration fees will be offered to the 2nd paper onwards by the same primary author
- Dates of Early Bird, Standard and delayed will be published on the COA website, COA and DYPUSOA, conference social media channels. Link to follow is at the end of the brochure.

### **Registration fees includes:**

- Entrance to all sessions of the Conference
- An electronic copy of the Conference proceedings
- · Access to recordings of the virtual sessions
- Associated Conference materials
- · Lunch and refreshments during the conference day
- Coffee Breaks and Snacks: Refreshments will be provided during breaks in the conference schedule.
- Conference Program Booklets: Printing of schedules, speaker bios, and other relevant information.
- Conference e-Books: Distribution of e-books for abstracts and full-text proceedings, each with an ISBN number.
- Identification: Personalized name tag for conference identification.
- Name Badges and Lanyards: Custom badges for participant identification and networking.
- Delegate Kits: Bags containing conference materials
- The conference Networking Dinner
- Professional Photography and Videography: Capturing the event for promotional or archival purposes.
- Recognition of Excellence: Authors of top-tier papers will receive the "Best Scientific Paper" certificate.
- Peer-Review Process: Rigorous peer review for the articles and abstracts of the conference.

### Categories of Delegates

#### **Primary Author - Oral Presentation**

Primary authors and papers presenters. Selection of abstract is preferable to register for this category. Refer to early bird conditions for early bird registrations.

#### **Co-Author - Oral Presentation**

If you wish to attend the conference as a co-author on a paper you can register at this price. If you are registering as a co-author of a paper, another author on the paper must register for the publication of the paper. In case the co-author of one paper is the lead presenter of another, you need not register again as co-author. Only Lead authors will present on the dias.

#### **Student Delegates - Oral Presentation**

Students pursuing post graduation can register here. Selection of abstract is preferable to register for this category. Refer to early bird conditions for early bird registrations. Mandatory submission of proof of being a student to be uploaded.

#### **Poster Presentation**

Attend the conference with a Poster/Presentation Only – NO paper publication. If your abstract is not selected and you wish to present your work in a poster form, you can register for this category. You may opt for this category independently as well. You will have access to all sessions as a poster presenting delegate. You can register for this category even before submitting an abstract.

#### Attendee - Listener

If you wish to attend the conference without submitting a paper you can register at this price. You can register for the attendee category even before submitting an abstract.

#### **Additional Papers**

Additional papers written and presented by the same author can be added to a full registration for an additional cost. This is only valid when a full registration is also in the author's name.

#### **Earlybird Conditions**

In order to obtain the Earlybird rate, we must be in receipt of your full conference registration fee by the published Earlybird date. Although we endeavor to notify abstract acceptance before this date, external factors may prevent this. You can register directly as soon as you receive your preliminary acceptance letter.

#### **Payment Information**

Fees are payable in advance. We accept payment by most international credit or debit cards or bank transfer. The payment link and brochure will have all relevant details

# Conference Steering Teams

#### **Chief Patron:**

**Ar. Prof. Abhay Purohit,** President- COA Council of Architecture.

#### **Convenor:**

**Ar. Prof. Jayashree Deshpande,** Director, COA-TRC, Pune

#### **Co-Patron:**

**Dr. Vijay D. Patil**, Hon Chancellor D.Y. Patil Deemed to be University, Navi Mumbai

#### **Co-Convenor:**

**Prof. Aparna Surve,** Dean, D.Y. Patil School of Architecture Navi Mumbai

#### **Conference Advisors: (COA Office bearers):**

Ar. Gajanand Ram (Vice President-Council of Architecture)
Ar. R.Ramesh Kumar (Member, Exe. Committee, Council of Architecture)
Ar. Punit Sethi (Member, Exe. Committee, Council of Architecture)
Ar. Lalichan Zacharias (Member, Exe. Committee, Council of Architecture)
Ar. P. Vaitianadin (Member, Exe. Committee, Council of Architecture)

#### **Conference Coordinator:**

Shri. R. K. Oberoi, Registrar, Council of Architecture

#### **Publication Committee:**

- Prof. Anita Shyam (DYPUSOA, Navi Mumbai)
- Prof. Anil Pawade (DYPUSOA, Navi Mumbai)
- Prof. Nandini Kulkarni (SMMCA, Nagpur)
- Prof. Probuddha Mukhopadhyay (DYPUSOA, Navi Mumbai)
- Prof. Roopal Deshpande (SSPAD, Nagpur)

#### Core Committee (D.Y Patil School of Architecture, Navi Mumbai):

- Prof. Anil Pawade
- Prof. Anita Shyam
- Prof. Dinesh Zope
- Prof. Megha Sharma
- Prof. Mahek Khan
- Prof. Mary Thomas
- Prof. Mayuresh Gorey
- Prof. Preeti Nayak
- Prof. Probuddha Mukhopadhyay
- Prof. Sachin Joshi
- Prof. Sampada Khokhle
- Prof. Shailendra Thakan
- Prof. Suchita Karale

#### **Scientific Committee:**

- Prof. Aneerudh Paul, Professor at the Kamla Raheja Vidyanidhi Institute for Architecture and Environmental Studies (KRVIA), Technical Advisor, SPARC, Director of the Collaborative Design Studio
- Ar. Krishnamurthy, Principal Architect FOLDS Design Studio
- Dr. Mathilde Marengo, Head of Studies, Co-director of the Master in City and Technology, Faculty and PhD Supervisor at the Institute for Advanced Architecture of Catalonia.
- Ar. Nuru Karim, Founder & Design Principal Nudes
- Prof. Pradyumna Vyas, President-elect, World Design Organisation (WDO) Senior Advisor, Confederation of Indian Industry (CII)
- Ar. Prasad Vaidya, Director Solar Decathlon India and the Sustainable Energy Lab at IIHS
- Ar. Sameep Padora, Dean of Faculty of Architecture, CEPT and Principal sP+a (Sameep Padora and Associates)
- Dr. Sanjeev Vidyarthi, Former Professor and Department Head, Co-Director, Master of City Design Program, Department of Urban Planning and Policy, University of Illinois, Chicago
- Ar. Swaraj Dasgupta
- Ar. Tushar Sogani

### **Conference Schedule**

### Day 1:

#### Session 1-09:00 TO 13:00

- Inaugural Session
- Opening of Symposium
- Chief Guest Speech
- Lunch Break

#### Session 2- 14:00 TO 16:00

- Keynote lectures
- Expert Speaker presentations
- High Tea

#### Session 3- 16:00 TO 18:00

Panel Discussion

### Day 2: Research Paper Presentation

#### Session 1-09:00 TO 11:00

- Simultaneous sessions for Track 1 of all 4 Themes
- Tea Break

#### Session 2- 11:30 TO 13:30

- Simultaneous sessions for Track 2 of all 4 Themes
- Lunch Break

#### Session 3- 14:00 TO 16:00

Townhall Panel Discussion

#### Session 4 16:15 TO 17:30

- Valedictory Function
- High Tea

### **About the Venue**

### DY Patil University Centre of Excellence



The DY Patil University Centre of Excellence was born out of the conviction, foresight, and passion for educational excellence of the Honourable Chancellor of DY Patil Deemed to be University, Dr. Vijay D. Patil. To bring this vision to life, Dr. Vijay D. Patil collaborated with Foster + Partners to create this remarkable monument. The center supports the university's innovative and multidisciplinary teaching methods, legacy, and ethos of excellence, providing high-quality learning and living spaces for over 3,000 students. The project also features a vibrant two-acre sky garden with native plants, pond life, and relaxation areas.

Notably, this building is Foster + Partners' first educational project in India. The project has been awarded the LEED Platinum rating and was presented with the 'Public / Institutional Project of the Year' award at the Aces of Space Design Awards 2023.

To know more, please click here to watch "The Making of a Monument," an exclusive documentary on the creation of the Centre of Excellence.

### How To Get There

DY Patil School of Architecture benefits from its strategic location in Nerul, Navi Mumbai, offering excellent connectivity to Mumbai and surrounding areas. Whether you choose to travel by rail, road, or air, you will find it convenient to reach the venue for the Transformations 2025 conference.

#### By Rail:

Nerul is a major station on the Harbour Line of the Mumbai Suburban Railway. From Chhatrapati Shivaji Maharaj Terminus (CSMT), and any station on the harbour line, you can take a direct local train to Nerul or Juinagar, another station in close proximity to the venue. The school is a short auto-rickshaw or taxi ride from the mentioned railway stations.

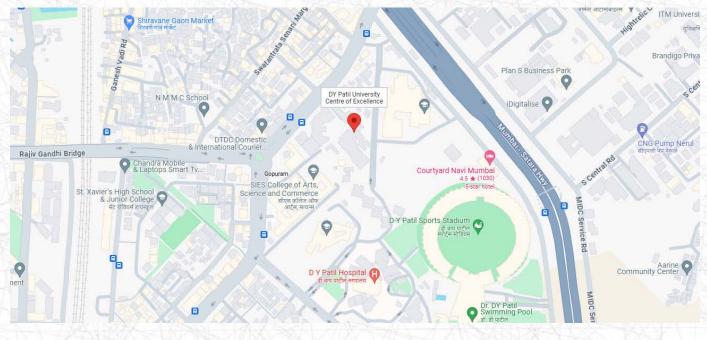
#### By Road:

Nerul is well-connected by road, with regular bus services from various parts of Mumbai and Navi Mumbai. The Mumbai-Pune Expressway also provides easy access for those coming from Pune and other nearby cities. Private cabs and app-based ride services are readily available for a convenient journey.

#### By Air:

For those arriving by air, Chhatrapati Shivaji Maharaj International Airport is the closest airport. From the airport, you can hire a taxi or use app-based ride services to reach Nerul, which is approximately 30 km away. The journey typically takes about an hour, depending on traffic conditions.

Click the map for the google location.



# Contact

Contact us at transformations2025@gmail.com for any queries. O Follow for updates: conference\_dypusoa | council\_of\_architecture\_india | dypusoa



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