Subject: Building construction and materials (2nd to 4th Year)

Country visited - Singapore

Sr. No.	Reporting items	Details
1	Name of the Activity	**Archineering Cell international tour**
2	Name of the College	Dr. Bhanuben Nanavati College of Architecture, Maharshi Karve Stree Shikshan Samstha (MKSSS)
3	District and State	Singapore
4	No. of students participated in the Activity	**20**
5	No. of Faculty Members Participated	**01**
		Resource Faculty – **Dr.Poorva Kulkarni, BNCA,Pune.** **Dr.Johannes Widodo, NUS, Singapore.**
6	Name of the Head of the Institution	**Dr. Anurag Kashyap**
7	Email of the Head of the institution	anurag.kashyap@bnca.ac.in
8	Date	**27th July to 2nd August 2024**
9	Highlights of the program/ Activity	• Day 1: Arrival in Singapore and visit to Changi jewel • Day 2-: One day workshop at National University of Singapore • Day 3,4: Architectural sightseeing • Day 5: Architectural sightseeing and departure
10	Feedback/ Event Outcome	• The workshop demonstrated many sustainable strategies implemented by National University of Singapore to reduce carbon footprint.Students did a campus walk to understand the sustainable landscape strategies too.The students visited SD4 which is net zero energy building to understand the sustainable strategies. • Students visited NUS library too.The students visited Capita Spring urban farm to study the design for promotional activity for local breeds of plants and vegetables.

		• Students visited museum of ice cream to study a theme based design of a public premise. • Students also learnt the technologies involved in the design and execution of places of conventional sight seeing.

1. Site Visit Photos

Workshop with Prof.(Dr.) Johannes Widodo, NUS,Singapore

BNCA group at Changi airport, Singapore.

Faculty explaining strategies implemented to conserve water in landscape design

BNCA group at museum of Ice cream

2. Brief about the visit, Aim, Objective, and Learning

The tour commenced with our arrival at Changi international airport. A half day was spent in studying Changi Jewel which is a good example of beauty and technology at the airport. The students were introduced to the design of Jewel, its general layout, and the different types of interactive spaces by using various materials. The next day was dedicated to intensive workshop at National University of Singapore. Students attended a session by NUS professor, Dr.Johannes Widodo. He talked about many sustainable strategies implemented by National University of Singapore to reduce carbon footprint. Students did a campus walk to understand the sustainable landscape strategies too. The students visited SD4 which is net zero energy building to understand the sustainable strategies.

They delved into detailed observations and construction techniques implemented in architectural and landscape design as well., interacting closely with the NUS professor and few representatives of NUS for getting more insights into the sustainable strategies implemented.
On the fourth day, we embarked on a cultural excursion to China town. Here, students had the opportunity to explore the ancient Buddha tooth relic temple of China town. Additionally, they visitedGardens by the Bay, City gallery of Singapore and Marina Bay Sands Sky Park deck, further enriching their understanding of the region's cultural and historical and technological significance. This immersive experience provided students with insights into the architectural heritage and urban fabric of

Singapore. Following lunch, we bid farewell to Singapore and boarded our plane back to Pune, concluding the enriching tour.

Throughout the tour, students were actively engaged in observing, deepening their understanding ofurban spaces, architectural design, and cultural heritage. The combination of practical fieldwork, cultural exploration, and expert guidance ensured a comprehensive learning experience for all participants.

This settlement study tour to Singapore proved to be both educational and enriching, leaving a lasting impression on the students' academic and cultural perspectives.

Aim:

Visiting Singapore is an excellent choice for architecture students. The city-state offers a blend of historical, modern, and futuristic architecture, with a unique focus on sustainability and smart city design. The mentioned objectives were be particularly inspiring and informative for architecture students.

Objectives:

1. Study Iconic Modern and Contemporary Architecture

Singapore is known for its stunning modern architecture, often blending cutting-edge technology with cultural elements. Key landmarks include:

- Marina Bay Sands: A blend of futuristic design and engineering, this iconic resort is known for its unique "ship" structure that spans across three towers.
- Gardens by the Bay: Famous for its Supertree Grove and the Cloud Forest, these are great examples of integrating nature with urban architecture.
- The Esplanade: Known for its distinctive durian-inspired shape, the Esplanade is a cultural venue that offers insight into sustainable and adaptive reuse architecture.

2. Explore Sustainable and Green Architecture

Singapore has made sustainability a key focus in its urban development. The city serves as a global leader in green architecture, with numerous buildings showcasing eco-friendly designs. Students can explore:

- NUS: Incorporates green building features, such as water recycling systems and sustainable landscaping.

3. Engage with Urban Planning and Smart Cities

Singapore has an advanced approach to urban planning, blending smart technology with efficient infrastructure. Architecture students can learn from:

- The Singapore Urban Redevelopment Authority (URA): A visit to their headquarters or an exhibition can give insight into Singapore's strategic long-term planning for land use and urban growth.

- Smart Nation Initiatives: See how the city integrates technology into urban design and infrastructure, including intelligent transportation, smart buildings, and data-driven urban systems.

4. Understand the Heritage and Preservation Movement

While Singapore is known for its modern architecture, the city also places high importance on preserving its history. Architecture students can:

- Visit Chinatown, Little India, and Kampong Glam to study traditional architecture, and see how old buildings are preserved and adapted for modern use.

6. Examine the Role of Public Space and Civic Engagement

Singapore has successfully integrated public spaces into its urban environment, which has greatly enhanced the quality of life for its residents. Students can:

- Explore Marina Bay Waterfront Promenade and Singapore River to study urban waterfront design.
- Visit The Southern Ridges: A trail that links parks and nature reserves, showcasing how green spaces can be integrated into dense urban areas.
- Understand the role of public art in architecture, with installations scattered throughout the city, such as in The Arts & Heritage District.

7. Visit Architectural Institutes and Libraries

NUS and NUS Library

8. Experience the Cultural Context of Architecture

Understanding the cultural context behind Singapore's architecture is crucial for any architecture student. Singapore's diverse cultural landscape is reflected in its buildings, from Chinese temples to Malay kampungs and Indian mosques. Some highlights include:

- The Buddha Tooth Relic Temple: A stunning example of Buddhist architecture.
- Sri Mariamman Temple: Singapore's oldest Hindu temple, with intricate detailing and historic significance.

Conclusion:

Visiting Singapore helped architecture students to engage with a diverse range of architectural styles, technologies, and planning strategies. From exploring green building practices to studying historical conservation efforts, the city offers rich, hands-on learning experiences

Report prepared by: Prof. (Dr).Poorva Kulkarni (Tour in charge faculty)

Coordinator IQAC Principal