
# SYMBIOSIS INSTITUTE OF TECHNOLOGY

**Constituent of Symbiosis International University**

**Established under section 3 of the UGC Act 1956, Vide notification no. F.9- 12/2001(U.3 of the Government of India) - Approved by all India council for technical education (AICTE)**

## INDUCTION PROGRAMME REPORT
## [2024-2028]

## DEPARTMENT OF CIVIL ENGINEERING

Content of Details:

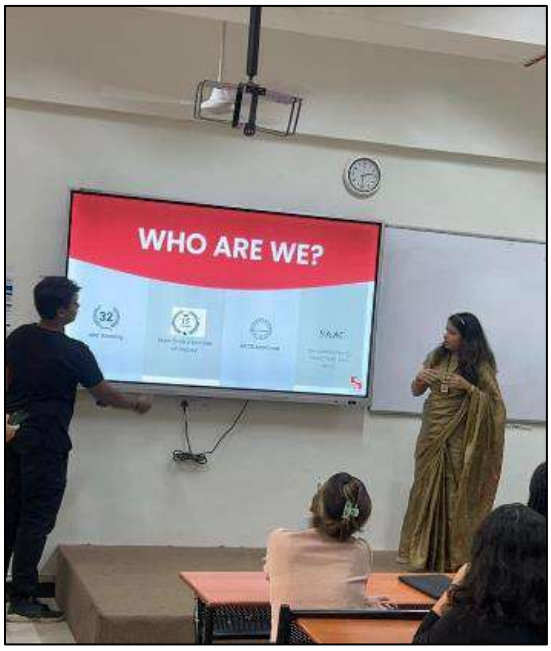
DAY 1: -

| Sr.No. | Date | Time | Name of the Event | Event In-charge | Venue | Page No. |
|---|---|---|---|---|---|---|
| 1. | 01.08.2024<br><br>Thursday | *2:15PM-2:20PM* | *Welcoming the First year Students* | Student Representative ( Avishruti Das) | Classroom-A102 | 3 |
| 2. | | *2:20PM-3:10PM* | *Introduction to the Faculty* | Respective faculty | | 4 |
| 3. | | *3:40PM-3:50PM* | *Introduction to various societies (including CESS & IEEE)* | Dr. Mugdha Kshirsagar | | 5 |
| 4. | | *3:50PM-4:00PM* | *Investiture Ceremony of CESS &ASCE 2024-2025 &Felicitation* | Ms. Arundhati Warke, Dr. Sayali Sandbhor, Dr. Amar Jain & Dr. Mugdha Kshirsagar | | 5 |
| 5. | | *4:00PM-4:10PM* | *Token of Appreciation* | Ms. Arundhati Warke & Dr. Sayali Sandbhor | | 6 |
| 6. | | *4:10PM-4:20PM* | *Concluding Speech* | Dr. Amar Jain | | 6 |

**Induction Day 1:**

Transitioning from school to college life marks a significant shift from a structured, guided environment to one of increased independence and self-reliance. In college, students are given more freedom to manage their time, choose their courses, and pursue their interests. This period fosters personal growth, as students navigate new social dynamics, take on greater responsibilities, and begin to focus more on career development. The experience encourages exploration, both academically and personally, helping students develop critical thinking, decision-making skills, and a sense of autonomy that prepares them for the challenges of adulthood.

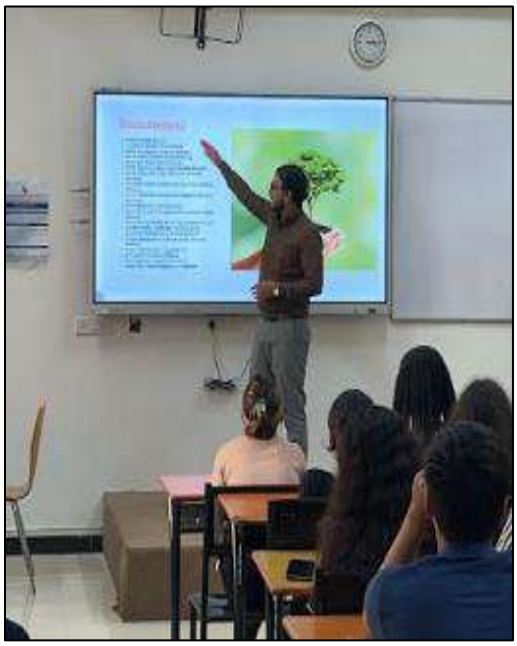
The induction day commenced with a warm welcome from Ms. Avishruti Das, who introduced the college and extended a heartfelt welcome to the new students providing a comprehensive overview of the institution's values, mission, and the significance of its engineering programs.




Following her address Dr. Sayali Sandbhor, the Head of the Department, took the stage. Dr. Sandbhor provided an overview of the Civil Engineering Department at Symbiosis Institute of Technology, Pune. She discussed the essential role civil engineers play in various industries. She emphasized the department’s dedication to practical, hands-on skills and the use of crucial engineering software such as AutoCAD, Revit, Bentley, and other software readily available in the college. Dr. Sandbhor also provided a detailed overview of the curriculum, which includes both traditional and advanced courses. She highlighted how the department continuously updates its curriculum by incorporating feedback from industry experts, alumni, parents, and current students. This approach ensures that the education provided is aligned with current industry needs.

The department also offers a range of additional academic opportunities, including honors and minors, short-term certification courses, and focused skill development activities. The holistic engineering curriculum is designed to prepare students comprehensively for the challenges of modern industries. The college's accreditation by prestigious bodies like NIRF, AICTC, and NAAC ++ was also highlighted, underscoring its commitment to maintaining high academic standards. With over a decade of legacy, the college is known for its strong focus on research, robust industry connections, and active community outreach.

Moreover, the department offers a cohesive environment as well as advanced programs such as joint dual degree initiatives with institutions like D.K University, supported by European Union-funded labs and cutting-edge research facilities. The infrastructure of the college, including its world-class labs and research environments, plays a vital role in nurturing a strong connection with the industry. This comprehensive approach ensures that students are well-equipped with the knowledge and skills needed to succeed in their careers, with civil engineering offering vast opportunities where, as emphasized by the department, "**the sky is the limit**." This was followed by the professors who are the torch bearers for the students giving a brief introduction about themselves and the subject they are going to teach in the upcoming semesters with its importance in our industry.



Shortly after, a brief idea about college life, hostel life, and different sports activities i.e. Prota (Annual official sports event), and annual cultural events i.e. reverb, Aarambh, transcend, etc. was organized on campus. The students were also introduced to the Civil Engineering Society of Symbiosis (CESS), along with ASCE and TTC. Following this introduction, they learned about the society's purpose and functions by Dr. Mugdha Kshirsagar their mentor along with Dr. Amar Jain.



Subsequently, Dr. Arundhati Warke, the Deputy Director of Academics felicitated the batch of 2025 who gave it their all for the various posts they had managed in the CESS and ASCE. The posts were officially handed over from the outgoing students to the batch of 2026.



As a token of appreciation, the new students received a model of India Gate, designed and crafted by the senior students using laser-cut technology, and the day had come an end with a concluding speech by Dr. Amar Jain.

| | Date | Day | Time | Event Name | Venue |
|---|---|---|---|---|---|
| **DAY 3** | 3 August 2024 | Saturday | 3.30pm : 4.30 pm | UHV 1 | Classroom B-106 |
| **DAY 4** | 5 August 2024 | Monday | 11.30pm: 12:30pm | UHV2 | Classroom B-106 |
| **DAY 4** | 5 August 2024 | Monday | 11.30pm: 12:30pm | UHV3 | Classroom B-106 |

Over the course of several days, the agenda unfolds with a comprehensive introduction to the 2030 Agenda for Sustainable Development, a pivotal global agreement adopted by world leaders at the United Nations in September 2015. Participants are introduced to the 17 Sustainable Development Goals (SDGs), which officially came into effect on January 1, 2016, with the ambition of addressing the world's most pressing challenges, including poverty, hunger, inequality, and climate change. The first day emphasizes understanding the significance of these goals, particularly SDG 1, aimed at ending poverty in all its forms everywhere, and SDG 2, which seeks to end hunger, achieve food security, and promote sustainable agriculture.



On the following day, participants engage in a deep dive into specific SDGs, with a focus on SDG 3, which centers on ensuring healthy lives and promoting well-being for all ages. This session underscores the critical role of health and well-being in sustainable development. Participants discuss the integration of these goals into educational

curricula to broaden students' awareness of global diversity, thereby inspiring future actions toward achieving the SDGs. To cement this understanding, students participate in a “Diversity Activity,” a 5-10 minute exercise designed to build empathy through storytelling. They are encouraged to share their own stories and reflect on their lives, considering what makes their family, relationships, and experiences unique. This activity fosters appreciation for different life experiences and inspires students to think about how their good fortune can motivate them to contribute to achieving the SDGs.



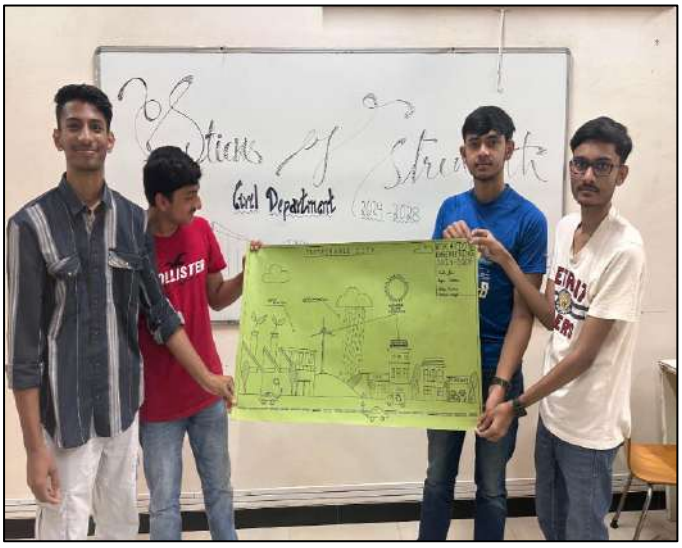
Midway through the event, the focus shifts to understanding the interconnectedness of various SDGs, particularly those related to quality education (SDG 4), reduced inequalities (SDG 10), and partnerships for the goals (SDG 17). Students engage in discussions that prompt them to ponder questions such as what rights and freedoms they enjoy, how they perceive equality, and what makes their access to healthcare unique compared to others. This reflective activity helps build understanding and empathy towards others in their community and globally.

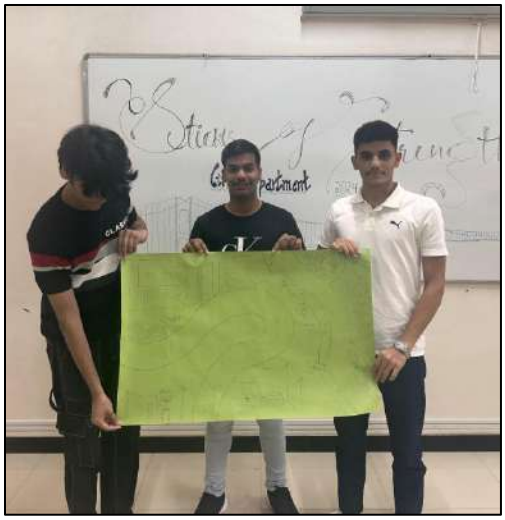
As the event progresses, attention is directed towards sustainable cities and communities (SDG 11), decent work and economic growth (SDG 8), and responsible consumption and production (SDG 12). Students are introduced to the concept of sustainable cities and are encouraged to think critically about how cities can be designed to enhance overall sustainability. This session culminates in an interactive activity where students are tasked with drawing their vision of a “Perfect Sustainable City.” They are asked to consider and include elements from the discussed SDGs, such as resilient infrastructure, inclusive communities, and sustainable consumption patterns.

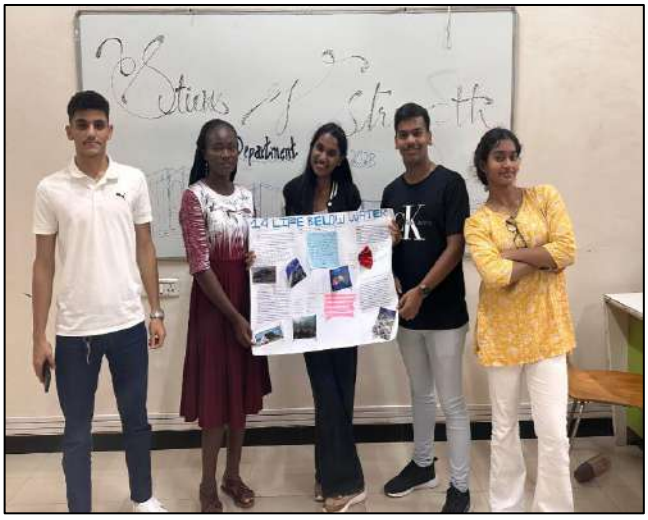
The event concludes with students presenting their drawings of the cities of the future, highlighting the SDGs they believe are most crucial in creating sustainable urban environments. This final activity not only reinforces their understanding of the SDGs but also encourages them to think creatively about how these goals can be implemented in real-world contexts, ultimately inspiring them to contribute to a more sustainable and equitable future for all.

| | Date | Day | Time | Event Name | Venue |
|---|---|---|---|---|---|
| **DAY 5** | 6 August 2024 | Tuesday | 3.30 pm: 4.25 pm | UHV 5 | Classroom A-102 |
| **DAY 6** | 7 August 2024 | Wednesday | 3.30pm : 4.25 pm | UHV 6 | Classroom A-102 |

In alignment with the aim, mission, and vision of our institute, the UHV sessions have been carefully designed to address crucial global challenges. During the third session, we focused on several Sustainable Development Goals (SDGs) including SDGs 12 (Responsible Consumption and Production), 13 (Climate Action), 14 (Life Below Water), 15 (Life on Land), 16 (Peace, Justice, and Strong Institutions), and 17 (Partnerships for the Goals). We highlighted the significance of oceans, emphasizing their role in regulating climate, providing food, and supporting biodiversity. The session also examined the Deepwater Horizon oil spill, underscoring its impact as one of the largest marine oil spills in history. Additionally, we discussed various human activities affecting the ocean, such as recreational and commercial fishing, container shipping, deep-sea oil extraction, seabed mining, tourism, and pollution from sewage and plastics. These discussions aimed to deepen understanding of these issues and promote effective strategies for sustainable management and conservation.



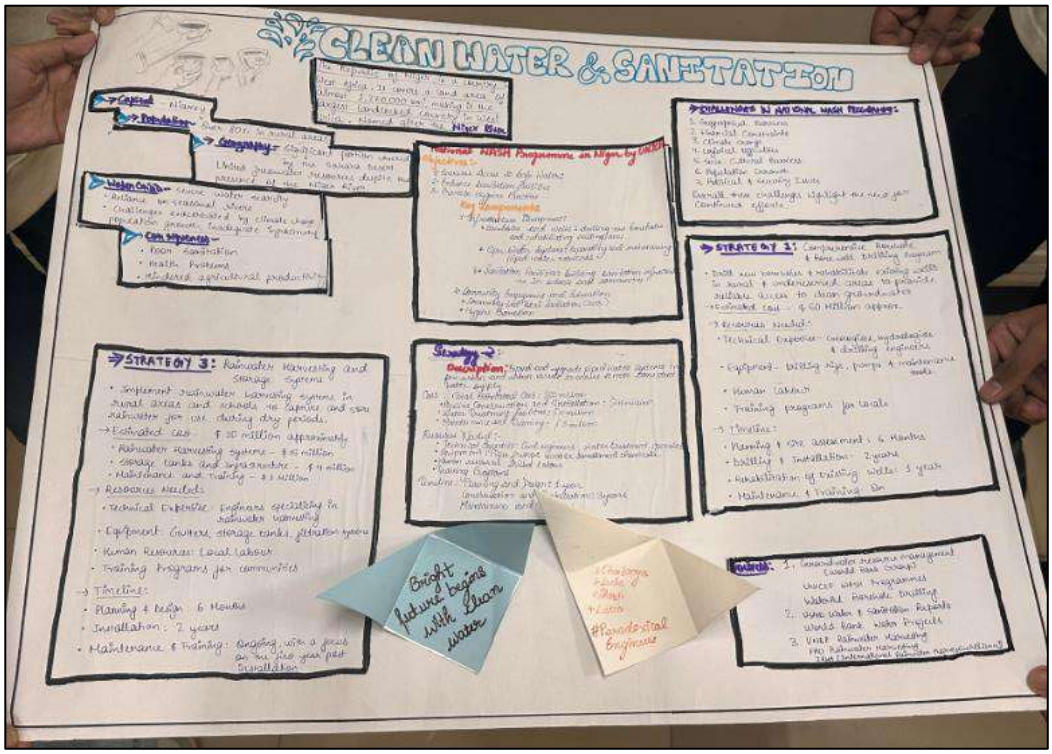




An activity was given to the students where they were supposed to make a research report on the topics given to them were deforestation, plastic pollution, over-fishing, species, extinction climate, change air pollution and sewage pollution which should contain the cause, impact, potential solutions and were supposed to make flowchart.

In the fourth session, we explored the concept of sustainability in depth, featuring a TED Talk by Alex Steffen titled "The Route to a Sustainable Future." This presentation highlighted key strategies for achieving sustainability and addressing global environmental challenges. The session also focused on how governments can promote and achieve sustainability goals through policies, regulations, and initiatives.

We discussed several relevant Sustainable Development Goals (SDGs) related to sustainability, including those focused on responsible consumption and production, climate action, and life on land and below water. The conversation included an examination of carbon neutrality, discussing its significance and potential outcomes. Becoming carbon neutral would involve reducing greenhouse gas emissions to net zero, which could lead to a more stable climate, improved air quality, and enhanced ecosystem health.




As part of the session, participants engaged in an activity to design a roadmap for how India could transition to a carbon-neutral society. This exercise aimed to identify practical steps and policies needed to reduce carbon emissions, increase renewable energy use, and promote sustainable practices across various sectors, including transportation, energy production, and waste management.

The Mentor-Mentee program serves as a vital support structure designed to create a safe and constructive environment for students to address their concerns, seek guidance, and foster personal and academic growth. This initiative establishes a dedicated space and time for students to connect with their mentors, facilitating open communication between them and the management.

| | Date | Day | Time | Event Name | Venue |
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| **DAY 2** | 2 August 2024 | Friday | 11.30pm : 12.30 pm | Mentor Mentee | Classroom B-106 |

On this day, a significant milestone was achieved as the Mentor-Mentee relationship formally commenced for the 2024-2028 batch. This new phase marks the beginning of a structured and supportive relationship where mentors provide valuable guidance and support to their mentees throughout their academic journey.

Dr. Amar Jain and Dr. Mugdha Kshirsagar , the designated mentors for this batch, introduced students to the program, outlining its objectives, processes, and benefits. They emphasized the importance of the mentor-mentee relationship in helping students navigate their academic and personal challenges, offering insights into effective communication, goal setting, and problem-solving.The program is designed to ensure that every student has mentor who will offer personalized advice, help them set and achieve academic and career goals, and provide a confidential space to discuss any issues or grievances they may have. This initiative not only aids in the holistic development of students but also strengthens the bond between students and the institution, fostering a supportive and nurturing educational environment.

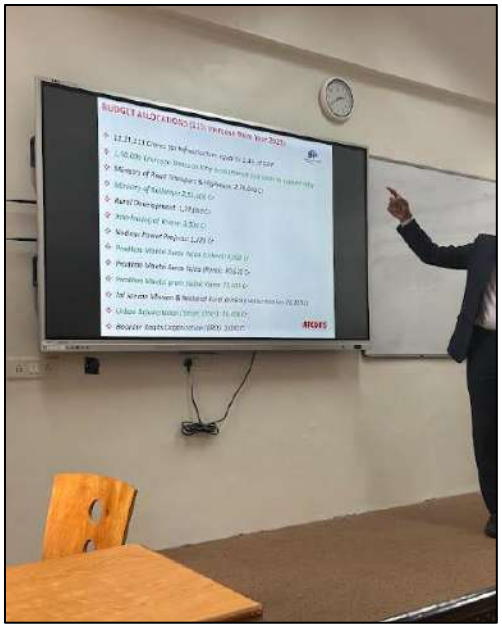
| Date | Day | Time | Event Name | Venue |
|---|---|---|---|---|
| **10 August 2024** | Saturday | 9:00am | Sticks of Bridge | Concrete Lab |
| **10 August 2024** | Saturday | 2:00pm | Guest Lecture | Classroom A-102 |

The induction program held yesterday at 2:00 PM was an insightful session led by Dr. Laxman Rao Mantri, DGM and Head of Designs for the Southern Region at Afcons Infrastructure Limited. The event was introduced by Ms.Avishruti Das, who welcomed all attendees with a brief introductory speech, setting a positive tone for the session. Dr. Mantri's presentation focused on the vital role of civil engineering in shaping the world and the pivotal contribution of civil engineers to society. Dr. Mantri began by discussing the marvels of civil engineering, both in India and around the world. He highlighted the long-standing legacy of civil engineers in creating groundbreaking structures that have transformed societies.

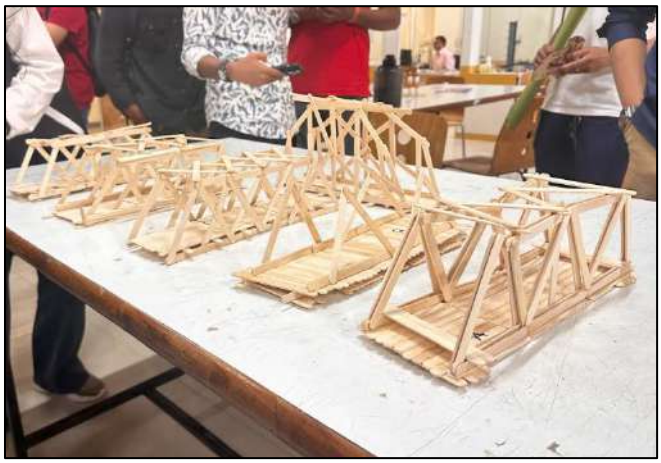
Quoting Sir M. Visvesvaraya, one of India's most revered engineers, he said, "Every man who has become great owes his achievements to incessant toil," reminding the audience that dedication and hard work are essential to achieving greatness. This quote was particularly significant, as Sir Visvesvaraya's birthday is celebrated annually as Engineers' Day in India, a day to honor the contributions of engineers to the nation's progress. Dr. Mantri emphasized the importance of civil engineering as a key driver of development and economic growth. He noted that civil engineering is the second-largest employment generator in India, providing opportunities to millions and playing a critical role in shaping the country's infrastructure. He highlighted the fact that civil engineering has been instrumental in boosting the GDP by 13%, and India is now recognized as the third-largest infrastructure development country in the world. This growth has created immense opportunities for aspiring engineers and underscores the significance of the field in the nation's development.

The presentation also covered the various branches of civil engineering, including construction engineering, structural engineering, transportation engineering, water resources engineering, geotechnical engineering, and environmental engineering. Dr. Mantri explained how each of these branches plays a crucial role in the development of infrastructure, from building highways and bridges to designing sustainable water systems and ensuring environmental protection. He also emphasized that civil engineering is a highly interdisciplinary field, requiring collaboration across many areas of expertise to solve complex problems and deliver projects that are both functional and sustainable. Dr. Mantri also shed light on civil engineering as a career, emphasizing its importance in the future job market. He explained that as India continues to develop its infrastructure, the demand for skilled civil engineers will only increase, offering vast opportunities for future professionals in the field.

He encouraged students to embrace the challenges and rewards of civil engineering, noting that it offers not only a fulfilling career but also the chance to make a lasting impact on society. He also spoke at length about some of the major engineering marvels that have shaped modern India, showcasing the country’s immense potential in civil engineering. He discussed the construction of the Atal Tunnel, the world's longest tunnel above 10,000 feet, which was built to enhance connectivity in the northern region of India.


Dr. Mantri also highlighted the Chenab River Bridge, the world's highest railway bridge, which exemplifies India's ability to undertake challenging engineering projects. Other projects included the Mumbai-Nagpur Samruddhi Expressway, one of India's fastest expressways, and the Kolkata Underground Metro, the first underwater metro project in the country. These projects demonstrate the scale, ambition, and complexity of modern civil engineering efforts in India. Beyond the technical aspects of the profession, Dr. Mantri emphasized the personal qualities essential for success in civil engineering. He spoke about the importance of dedication, attention to detail, problem-solving skills, and a strong work ethic. Civil engineering, he noted, is a field that requires perseverance, innovation, and the ability to overcome challenges. Dr. Mantri encouraged attendees to develop these qualities and to remain adaptable, as the industry continues to evolve with new technologies and methodologies.



In closing, Dr. Mantri reiterated the Significance of civil engineering in shaping the future of not only cities but also nations. He urged the aspiring engineers in the audience to take pride in their chosen field, as it offers a platform to contribute meaningfully to society while solving some of the world's most pressing challenges. The induction program concluded with a question-and-answer session, where students had the opportunity to engage with Dr. Mantri and gain further insights into the field of civil engineering. Overall, the session was a comprehensive exploration of civil engineering's past, present, and future, highlighting its role as a cornerstone of infrastructure development in India. Dr. Mantri's presentation, combined with the interactive competition, offered valuable guidance and inspiration to those looking to make a career in this dynamic and impactful field.

Adding to the day's events, there was an exciting competition called "Sticks of Bridge, "where students were tasked with constructing a bridge using only 100 ice sticks and Fevicol, following specific guidelines. This hands-on competition fostered creativity, teamwork, and practical application of engineering principles, as students designed and built structurally sound bridges. The testing was done with hanging different measures of weights from the centre of bridge made. The competition concluded with the announcement of winners by Dr. Sanjay Kulkarni and Dr. Amar Jain, who recognized the most innovative and well-constructed designs. This engaging competition added a practical element to the day, allowing students to demonstrate their engineering abilities in a fun, competitive environment.