

# CIVIL TODAY

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Vidyavardhini's College of  
Engineering & Technology  
K.T. Marg, Vasai (W).



## ABOUT US:

Vidyavardhini's College of Engineering and Technology, Vasai is located on the sprawling campus of Vidyavardhini, spread over an area of 12.27 acres. The college is also accessible by road from Mumbai. Vidyavardhini Society received approval from AICTE to start the new college of Engineering & Technology with effect from July, 1994. The college is affiliated to the University of Mumbai for the four year degree program leading to the degree of Bachelor of Engineering.

### VISION:

To be a premier institution of technical education, aiming at becoming a valuable resource for industry and society.

### MISSION:

To provide technologically inspiring environment for learning.

To promote creativity, innovation, and professional activities.

To inculcate ethical and moral values.

To cater personal, professional, and societal needs through quality education.

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## DEPARTMENT VISION:

To transform students into creative and technically proficient Civil Engineers to serve the nation

## DEPARTMENT MISSION:

1. To adapt to collaborative teaching learning practices for efficient learning.
2. To become a centre of excellence for providing knowledge base and consultancy services to the community.
3. To follow ethical and moral practices and educate students for professionalism and sustainability.

## EDITORIAL COMMITTEE:

1. Ms. GLANI G MARIA
2. Ms. PUJA KADAM

## STUDENT EDITOR:

1. Mr. DEEPAKUMAR PATEL

# GREEN CLUB OF VCET, VASAI

The Green Club (GC) is established to provide the values of environmental stewardship among the students. It aims to work towards an eco-friendly environment in and around colleges and education institutions by efficient use of resources like water, waste, energy, and circularity. The formation of Green Clubs will primarily focus on coordinating with youth in the colleges to support environmental activities and projects within colleges and communities as extension services. Under this program, the aim is to empower students to participate in and take up meaningful environmental activities and projects. Green Club would be imbibed in college-level curricular activities to ensure effective implementation and act as a platform to develop sustainable lifestyles, knowledge, and leadership skills.



## Expert session on Rainwater Harvesting

Green Club of VCET in collaboration with Department of Civil Engineering had organized an Expert session on Rainwater Harvesting for all the Faculty members and students. The expert for the session, Mr. Sandeep Adhyapak, is, a renowned expert in the field of water resource management and a distinguished advocate of rainwater harvesting, delivered an engaging and informative presentation during the expert session.

Mr. Adhyapak emphasized the critical significance of rainwater harvesting as a solution to the growing water scarcity issue in many regions. He stressed the importance of harnessing rainwater as a valuable source of freshwater that could supplement the existing water supply systems. The expert session detailed the various advantages of rainwater harvesting, including its potential to reduce the strain on traditional water resources, mitigate flooding, and contribute to groundwater recharge. Moreover, it was highlighted that this method can lead to significant cost savings and promote water self-sufficiency at both individual and community levels.



Mr. Adhyapak provided insights into different rainwater harvesting techniques, such as rooftop rainwater harvesting, surface runoff harvesting, and groundwater recharge systems. He discussed the technological advancements in rainwater harvesting equipment and systems that can enhance efficiency and sustainability. The expert session featured several successful case studies of rainwater harvesting projects from around the world.



## IFAT Exhibition

IFAT, the prominent trade fair for water, sewage, solid waste, and recycling, hosted at the Bombay Exhibition Centre in Mumbai, showcased the latest advancements, innovations, and solutions in the environmental technology sector. The exhibition featured an extensive range of exhibitors, including leading companies, startups, and organizations specializing in water management, waste treatment, and recycling technologies. Exhibitors showcased cutting-edge products, machinery, and services. Seminars, conferences, and expert panels provided valuable insights into current industry trends, challenges, and opportunities.

## Exhibition of World of Concrete

- The World of Concrete exhibition held at the Bombay Exhibition Centre in Mumbai showcased a comprehensive array of concrete-related technologies, equipment, and innovations, providing insights into the latest trends and advancements in the construction and concrete industry. The exhibition presented a diverse range of exhibitors, including international and domestic manufacturers, suppliers, and service providers related to concrete technology, construction materials, and machinery.
- Attendees had the opportunity to explore cutting-edge technologies in concrete production, construction materials, tools, and equipment. Exhibitors showcased innovations in concrete mixing, pouring, finishing, and shaping machinery. Emphasis was placed on new developments in concrete formulation, including self-healing concrete, eco-friendly materials, and high-performance mixes catering to diverse construction needs.



Live demonstrations and displays of machinery, tools, and applications provided a hands-on understanding of how different concrete-related products and equipment functioned, offering valuable insights into their practical usage. The exhibition hosted seminars, workshops, and expert sessions focusing on industry trends, best practices, and emerging technologies in the concrete sector. Discussions encompassed sustainable concrete solutions and advancements in construction practices.



# Inauguration of ISSE Students Chapter

The Department of Civil Engineering organized the "Inauguration of ISSE Students Chapter and Lecture on Foundation Failures and Remedial Measures" on 5th October 2023, Thursday. The event took place in the Ground Floor Seminar Hall, and it was attended by students, faculty, staff, and esteemed guests. Indian Society of Structural Engineers (ISSE) has been a pillar of knowledge and expertise in the realm of structural engineering. With the establishment of our student chapter, we aim to carry forward this legacy and contribute to the growth and development of structural engineering in our region.



The event commenced with the welcome address by the Head of the Civil Engineering Department, Dr. Ajay S Radke, who extended a warm welcome to all attendees. Mr. Hemant Vadalkar, Honorable Secretary of ISSE addressed the attendees. He introduced the students to what is ISSE. Also, he highlighted the perks of joining ISSE as student and also as a faculty member. Mr. Shantilal Jain, President of ISSE graced the event with his presence on the day. He also addressed the audience highlighting the scope of his career as a Structural Engineer. ISSE connects such eminent Structural Engineers altogether which is a benefit to the practicing Structural and Civil Engineers to grow and connect. Dr. Ashutosh Dabli, Associate Professor ISSE Coordinator of the Civil Engineering Department addressed the attendees. His speech highlighted majorly on how beneficial and important are students Chapters in Engineering Colleges. Sir also highlighted the importance of exposure of budding engineers to the outside world and Professionalism in the field of Structural Engineering.



The vote of thanks was delivered by Mr. Nikhil Gavad, Assistant Professor of the Civil Engineering Department. He expressed gratitude to the chief guest, faculty, and staff for their efforts in organizing the event. The students' excitement for the upcoming academic year was palpable in the speech.



## Expert Lecture on Fire Safety

The expert lecture aimed to educate attendees about fire safety measures, emphasizing the importance of fire extinguishers and providing practical insights into their effective usage during emergencies. It includes understanding the fire triangle (heat, fuel, oxygen) and its relevance in preventing and controlling fires, identifying common fire hazards in different environments (residential, commercial, industrial). Various classes of fires (A, B, C, D, and K) and the corresponding fire extinguisher types suitable for each were explained in detailed with an overview of different extinguishing agents (water, foam, dry chemical, CO<sub>2</sub>, etc.) and their applications.



## Expert lecture on “Foundation Failures and Remedial Measures”

The Inaugural Function OF ISSE was followed by the expert lecture on “Foundation Failures and Remedial Measures”. The Chief Guest for the event, Mr. Shekhar Vaishampayan, a renowned Geotech Consultant, delivered an expert session on “Foundation Failures and Remedial Measures”. The lecture highlighted the different types of failures of foundations. The lecture also contained various case studies of actual failures, their causes, and Remedial measures taken to improve the capacity of foundations. He delivered an informative, inspiring, and motivating speech. The session was a resounding success, filled with enthusiasm and optimism. It provided an excellent opportunity for students to connect with their peers, faculty, and staff.





## PRODUCT SHOWCASE 2023 - NIRMITI

The Product Showcase 2023 held on Friday, 15th September, 2023 was a significant event for students and professionals in the civil engineering industry. This report provides an overview of the showcase, highlighting key products, technologies, and innovations that were presented during the event. The showcase aimed to facilitate knowledge exchange and networking among industry experts, engineers, and product manufacturers. The Product Showcase 2023-Nirmiti is organised by IGBC student's chapter association at Civil Department, VCET, Vasai.

The various engineering products are showcased to create the advancements taking place in the fields/industries of Civil Engineering. Also, it helps the Exhibitors to publicize their products & create new channel partners through this Product Showcase. This exhibition provides a platform to our students to interact with industry persons as well it creates the awareness of the recent industry advancements. Such events play a critical role in collaboration between academic institutions and industries in the overall development of both sectors. Also, emphasized that such partnerships bridge the gap between theoretical knowledge acquired in classrooms and practical application in realworld scenarios. The importance of organizing events like product showcases in the context of industry-institute collaboration. Product showcases provide a platform for industries to exhibit their latest innovations and technologies to students, faculty, and researchers. These events facilitate knowledge transfer and expose students to cutting-edge developments in their field of study. They encourage entrepreneurship and innovation among students by showcasing success stories and startup opportunities.



Additionally, Product showcases offer excellent networking opportunities for students. Meeting industry representatives, exploring potential internship and job openings, and establishing contacts for future collaboration are some of the tangible benefits of attending such events. Encouraging students to actively engage in organizing and participating in product showcases and similar events. Which experiences not only enhance their resumes but also contribute to their personal and professional growth.





## Visit TO IIT Bombay

The visit to IIT Bombay for a demonstration of the shake table provided students with a unique and enriching experience in the field of structural engineering. The demonstration showcased the innovative technology and methodologies employed in simulating seismic activities to study the behavior of structures under earthquake conditions. Students had the opportunity to witness the shake table in action, observing how it replicated the complex movements and forces exerted during an earthquake. This hands-on experience allowed them to understand the principles of structural dynamics.

## Guest Lecture On "Introduction To Smart City"

The Civil Department of Vidyavardhini's College of Engineering & Technology conducted a webinar on INTRODUCTION TO SMART CITY by Mr. Parveen Kumar Gulia as the guest speaker, he has an experience 14+ years and specialization in Smart City Projects, City Development Plans, Airport planning, Slum Redevelopment Plans, and many more projects. The seminar focused on the concept of smart cities and their significance in addressing the challenges faced by urban areas. The discussion revolved around the various aspects of smart urban infrastructure and its potential to drive economic growth and sustainability. Attendees learned about the challenges faced by urban areas, including immigration for job and education opportunities. The pressure on basic necessities and civil infrastructure was highlighted as well. Unplanned development and its negative outcomes were discussed, emphasizing the importance of sustainable urban planning. The seminar delved into the components of smart urban infrastructure, including information technology and communication integration into municipal services and physical infrastructure.

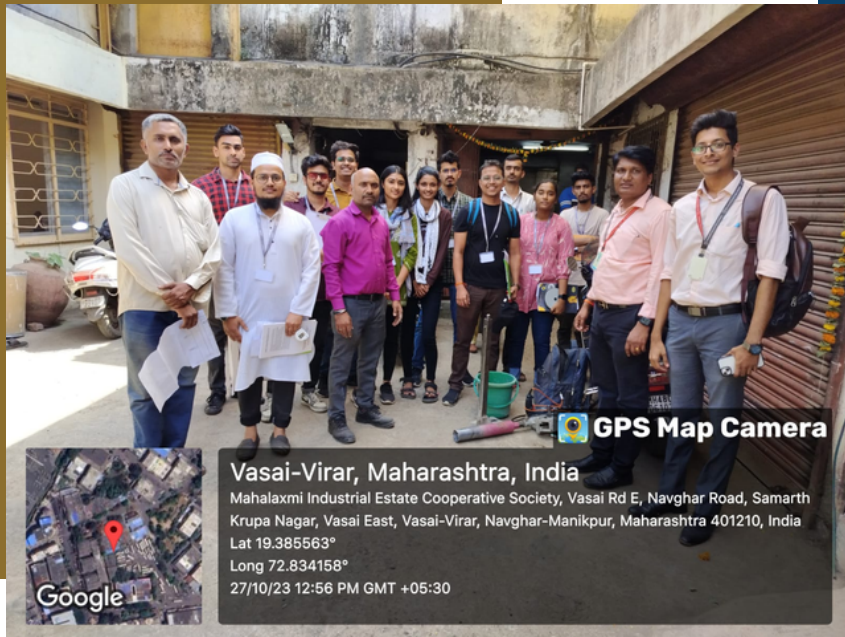


The discussion covered how these components contribute to efficient city management and sustainable growth. The seminar emphasized how smart urban infrastructure serves as an engine for economic growth. He explained various components, the importance of development, how a conventional city differs from a smart city, and how we can have a future in this sector. Also gave us a glimpse of the current smart city project in Hyderabad and the techniques used in the establishment of the project.



# SITE VISIT

The visit was organised by Civil Department at Mahalaxmi Industrial Area, Vasai East. The purpose of this visit was to visually examine and scrutinize the structure for potential cracks in columns, beams, and slabs, as well as identify any signs of steel corrosion. The objectives included verifying the actual structure against the original construction plans, conducting Non-Destructive Testing (NDT) through procedures such as the rebound hammer test, ultra pulse velocity measurement, and assessments of half-cell potential and carbonation. Additionally, the visit aimed to obtain core samples through cutting for testing, providing insights into the quality of workmanship and site-specific information.



## WALL OF CERTIFICATES

