

CESA 2022-23 TERM II

The Civil Engineering Student Association (CESA) serves as a vibrant hub for students within the civil engineering discipline, fostering academic, professional, and social growth.

We have organized seminars, guest lectures, and career fairs, connecting students with internships, co-op placements, and job opportunities.

Our commitment to excellence is evident in the diverse range of activities and events we've orchestrated, fostering an atmosphere where innovation is not just encouraged but celebrated. The symphony of ideas that resonates within our association is a testament to the collective passion we share for shaping the future of civil engineering.



BHARATI VIDYAPEETH
DEEMED TO BE UNIVERSITY
COLLEGE OF ENGINEERING, PUNE.



Enamor'23

e-Newsletter

Department of Civil Engineering

Building Innovations, Bridging Futures



Dr. Patangrao Kadam
Founder of Bharati Vidyapeeth

Bharati Vidyapeeth, the parent body of Bharati Vidyapeeth (Deemed to be University), was established in 1964 by the eminent educationist and visionary Dr. Patangrao Kadam.

He always put a premium on the quality of education imparted to students through the institutions of Bharati Vidyapeeth. He emphasized that students of Bharati Vidyapeeth should receive education in a very hospitable and conducive atmosphere. Since its inception, Bharati Vidyapeeth has been at the forefront of creating educational opportunities for millions of students including those from the rural and tribal regions as well as from the disadvantaged groups.

LEADERSHIP



Hon'ble Prof. Dr. Shivajirao Kadam
Chancellor
Bharati Vidyapeeth
(Deemed to be University)



Hon'ble Prof. Dr. Vivek Saoji
Vice- Chancellor
Bharati Vidyapeeth
(Deemed to be University)



Hon'ble Dr. Vishwajit Kadam
Pro Vice-Chancellor
Bharati Vidyapeeth
(Deemed to be University)

From Principal Desk

Message - It gives me immense pleasure to extend my warmest greetings to the Civil Engineering Department on the release of this year's departmental Newsletter. This publication is not only a reflection of the academic and technical prowess of our students and faculty, but also a platform that showcases creativity, innovation, and the spirit of engineering excellence.



Dr. Vidula Sohoni
Principal
Bharati Vidyapeeth
(Deemed to be University) College of
Engineering, Pune.

Civil Engineering has always been at the core of nation-building, shaping the physical world around us. From sustainable construction practices to smart infrastructure solutions, the role of civil engineers continues to evolve with the demands of the modern world. I am proud of the department's continuous efforts to keep pace with these changes and to provide students with a holistic and forward-thinking education.

I congratulate the editorial team, contributors, and faculty members for their hard work in bringing this newsletter to life. May it inspire readers and ignite new ideas for the future.

From the H.O.D.'s Desk

Message - As the head of this department, I am committed to fostering an environment that encourages intellectual curiosity, innovation, and collaboration.

Our faculty members are esteemed experts in their respective fields, dedicated to imparting knowledge and nurturing the next generation of civil engineers. Likewise, our staff members are here to support and guide students along their academic journey.



Dr. M. R. Gidde
HoD,
Civil Engineering
BVDU, CoE, Pune.

To our returning students, I encourage them to continue pushing their boundaries of their learning and exploring new avenues within civil engineering. To our new students, I extend a special welcome and urge them to embrace the challenges and opportunities that await them.

Together, we can make meaningful contributions to society and leave a lasting impact on future generations. I am confident that by working together, we can achieve great things and uphold the proud legacy of excellence associated with our department.

CIVIL DEPARTMENT



About Department

The Department of Civil Engineering offers undergraduate, postgraduate and doctorate degree courses. The Department of Civil Engineering is dedicated to building a better future through innovation and discovery.

Civil engineering is a professional engineering discipline that deals with the design, construction, and maintenance of the physical and naturally built environment, including works like roads, bridges, canals, dams, and buildings. It also enables students to solve complex challenges in areas like sustainability, energy, and the environment.

From the Editorial Desk

Message-With great pleasure and pride, we present to you this edition of our Civil Engineering Department magazine. This publication is more than just a collection of articles - it is a reflection of the passion, talent, and innovative thinking that thrives within our department.



Prof. S. D. Talegaonkar
Assistant Professor

Our aim through this magazine is to create a space where academic achievements, research insights, creative writing, and departmental activities come together in harmony. We believe that engineering is not just about structures and calculations; it's also about ideas, inspiration, and the constant pursuit of progress.

Message - It is with great excitement that we unveil this year's issue of our departmental magazine - a collective voice of the Civil Engineering Department. This edition brings together the vibrant spirit of our students and faculty, featuring technical write-ups, field experiences, and creative pieces that showcase the depth and diversity of thought in our community



Prof. Sujit M. Tarte
Assistant Professor

Each page of this magazine captures our journey - the challenges, the learning, and growth. We have tried to ensure a balanced blend of technical content, innovation highlights, and student expressions that speak to the core of what civil engineering truly represents.



Civil Engineering
Students Association

BRIDGE BUILDING COMPETITION



Bridge building competition conducted by CESA team with evaluators

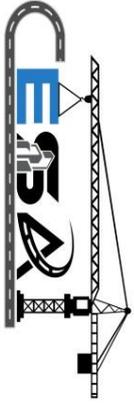
Group Photo of team Bridge Building Competition

The Techno-cultural fest Bharatiyam was celebrated with on 31 March and 1 April 2023. The Technical Event organized by Civil Engineering Department was “Bridge Building Competition”. This event was organized under the guidance of Dr. Milind Gidde (Head of the Department). This event consists of building a small bridge from given material in given time. The bridge with higher load carrying capacity and more span is considered winner. This event was carried out in Testing of Material Laboratory in Civil Engineering Department. The Testing for load was carried out in the open premises in front of the laboratory.

Students took part in this in a group of 3. Registration fees of Rs. 300/ was there for participating in the competition. The material given to students for building the bridge was Ice cream spoons (sticks), fevicol (adhesive), and thread.

Students were asked to build a bridge of 40 cm clear span between the supports. The bridges were tested for ultimate load carrying capacity. While testing the bridge for loading and finalizing the winner the span length of the bridge was also given due importance. Students were given a time span of 3 hours for completing the task. This competition was held on 31 March 2023. The bridge was tested for ultimate load and winners were declared on 1 April 2023. Total 5 teams registered for this competition. One team participated was from Architecture college from Bharati Vidyapeeth.

Prepared by: Dhruv Ghai, Ashish Anand, Mohit Kerni



SPORTS



The Civil Engineering Department delivered an outstanding performance in the Annual Sports Tournament, proudly marking its presence with significant achievements in both girls' and boys' team events. A highlight of the tournament was the stellar performance of the girls' volleyball team, who played with remarkable coordination, agility, and strategic gameplay. Their unwavering determination and consistent teamwork led them to an impressive 1st position, making them champions in their category. Each match witnessed their dominance on the court, as they outplayed strong contenders and remained unbeaten throughout the tournament.

Equally commendable was the performance of the boys' basketball team, who showcased great sportsmanship, resilience, and tactical prowess. Facing tough competition from various departments, the team fought hard in every match, demonstrating excellent defense and cohesive team play. Their efforts were rewarded with a well-deserved 2nd position, reflecting the high level of skill and commitment within the team.

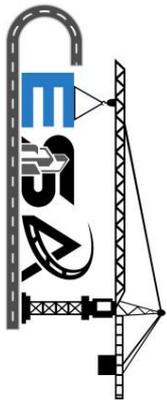
These accomplishments highlight the Civil Engineering Department's dedication not just to academic excellence, but also to holistic development through active participation in sports. The department takes immense pride in these achievements, which stand as a testament to the hard work, passion, and unity of its students.

ATAL TUNNEL



The Atal Tunnel is a marvel of modern engineering, and a strategic infrastructure project located in the Himachal Pradesh state of India. Named after former Prime Minister Atal Bihari Vajpayee, the tunnel is the world's longest highway tunnel above 10,000 feet, stretching 9.02 kilometers under the Rohtang Pass in the eastern Pir Panjal range of the Himalayas. Inaugurated on October 3, 2020, by Prime Minister Narendra Modi, the tunnel connects Manali to Leh, significantly reducing the travel distance by about 46 kilometers and cutting travel time by 4 to 5 hours. Built by the Border Roads Organization (BRO), the tunnel enhances all-weather connectivity to the Lahaul-Spiti valley, which was previously cut off for nearly six months during heavy snowfall. Constructed using the New Austrian Tunneling Method (NATM), it is equipped with modern safety features like fire detection, air quality monitoring, CCTV surveillance, and emergency exit tunnels every 500 meters. Beyond its civilian advantages, the Atal Tunnel also holds immense strategic importance for defense logistics along the Indo-China border, making it a vital asset in India's infrastructure and national security landscape.

Prepared By: Rohit Jadhav, Vivel Inchure, and Prashant Chandage



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SAMRUDDHI MAHAMARG



The Samruddhi Mahamarg, officially known as the Hindu Hrudaysamrat Balasaheb Thackeray Maharashtra Samruddhi Mahamarg, is one of India's most ambitious expressway projects, aimed at revolutionizing road connectivity within the state of Maharashtra. This 701-kilometer long, high-speed, access-controlled expressway connects the state capital Mumbai with Nagpur, the second capital of Maharashtra. Developed by the Maharashtra State Road Development Corporation (MSRDC), the project is designed to reduce travel time between Mumbai and Nagpur from nearly 16 hours to just 7-8 hours, significantly boosting efficiency in transportation and logistics.

Inaugurated in phases, with major sections already operational, the expressway passes through 10 districts, 26 talukas, and nearly 400 villages, acting as a backbone for economic development across the state. It incorporates advanced features such as intelligent traffic management systems (ITMS), toll plazas with FASTag, wildlife crossings, emergency response systems, and solar-powered amenities, setting a benchmark in road safety and environmental sustainability. The expressway also supports the development of 30+ agro-based and industrial growth centers along its route, aiming to promote rural prosperity and balanced regional development. By connecting major cities and fostering faster movement of goods and people, the Samruddhi Mahamarg is poised to become a game-changer in Maharashtra's infrastructure and economic landscape.

Prepared by: Atulya Singh, Dattaram Rawool and Akash Patil



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Civil Engineering Students Association

TRAFFIC AWARENESS



Traffic Awareness with One to one talk



Making aware of Traffic Responsibilities

B. Tech. (Civil) Engineering Semester VI Students carried out a Social activity on a theme of “Traffic Awareness” on 13 April 2023 at Traffic Signal near Katraj Dudh Dairy, Pune. Total 37 students from B. Tech (Civil) Semester VI were participated in this activity along with two faculty members namely Dr. P. B. Kodag & Prof. S. S. Thorat.

Students of Semester VI were distributed into groups of 7-8 students per group. Ideas regarding the traffic awareness were shared with the students one to two days before and asked them to prepare the charts, flex, board etc. to disseminate the information to the people using the road for travelling from one point to other for various reasons such as students going to school/classes/play-ground, people going to offices and business locations, travelers, etc.

Traffic authorities namely Mr. Kanase and Mr. Gaikwad were also present for this activity to maintain the smooth conduction of traffic, for guiding the students, and making aware the students and people travelling about the traffic awareness.

Prepared by: Akkashat Kumar and Aarav Raj