

# CIVIL BYTES 2023

D E P A R T M E N T M A G A Z I N E

*A VERSATILE AND PRACTICAL BRANCH OF ENGINEERING  
THAT HAS STOOD THE TEST OF TIME*

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### HOD's Message

*"Engineers turn dreams into reality with structures that serve and inspire humanity." – Anonymous*

*The Department of Civil Engineering is proud to present the 8th edition of our e-magazine, Civil Bytes 2023. As SJEC marks 22 years of excellence in technical education, we celebrate this milestone by continuing our commitment to quality education and holistic student development. Our pursuit of service and excellence has been filled with significant achievements, and we remain devoted to equipping students with the skills and values needed to positively impact society.*

*As we enhance our infrastructure and expertise, we recognize our role in contributing to national progress. The department has fostered strong ties with both industry and academic institutions through technical sessions, industrial visits, and active alumni participation. These efforts are designed to give students valuable exposure to real-world scenarios. This edition of the newsletter captures the highlights of these initiatives and showcases the vibrant academic and professional environment within the department.*



**Dr. B Yajneshwaran**

### Editor's Message

*Dear Faculty and Students,*

*Thank you for your valuable contributions to Civil Bytes 2023, which reflect the spirit and excellence of St. Joseph Engineering College. Our institution is known for its strong academic foundation, committed faculty, and world-class infrastructure.*

*It's inspiring to see your enthusiasm in academics, research, innovative projects, and community service—all of which play a vital role in the growth of our department. Let us continue to collaborate and showcase the talent and dedication of our civil engineering community.*

*I'm honored to serve as the editor of this edition and look forward to your continued support in making it a success.*



**Mr Ajeeth B**



**Mr Vasudev Hegde**  
Third Year  
Student Editor



**Ms Latha**  
Third Year  
Student Editor

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# ABOUT THE DEPARTMENT

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A vibrant Department, established in 2012, with the first batch of undergraduate students graduating in 2016, the Civil Engineering department aims to produce graduate engineers equipped for careers in the public and private sector encompassing areas such as structural engineering, geotechnical engineering, water resources, transportation, environmental and construction industries. The faculty is well trained in all major specializations of Civil Engineering. Spacious and well equipped state-of-the-art laboratories and computing facilities are the mainstay of the Department. Frequent visits by professionals from the construction industry and guest lectures by visiting faculty provide practical experience and keep students abreast with the latest advancements. Apart from the syllabus, extra activities like manual modeling and 3D AutoCAD modeling of structures are also conducted. The Department also offers consultancy services for soil testing and concrete testing to construction sites in and around Mangaluru. Department is accredited with NBA from the year the year 2021.

## DEPARTMENT VISION

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TO IMPART TECHNICAL EDUCATION AND NURTURE RESEARCH IN CIVIL ENGINEERING TO MEET THE NEEDS OF THE SOCIETY.

## DEPARTMENT MISSION

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1. Deliver curricula for students to meet the national and global demands of industry, society and research.
2. Strengthen the practical skills of students through interaction with industry.
3. Promote research and consultancy in all aspects of Civil Engineering.
4. Provide skilled training in emerging aspects of design and construction.
5. Develop in students and staff the spirit of innovation and professional ethics.

# BEST PRACTICES OF DEPARTMENT

DRIVEN BY EXCELLENCE, DEFINED BY  
PRACTICE



1. *Knowledge Enhancement through Technical Talks, Industrial Visits*
2. *International Conferences, Hands on Workshops*
3. *Collaboration with Industries (MOU's)*
4. *Career Guidance Through Motivational Talks by Alumni*
5. *Innovative Teaching Learning Practices*
6. *Department E-Newsletter*
7. *Conduction of various Technical Activities under Department Association "NIRMAN"*
8. *Initiating Research through Mini Projects*

*It is a time when we come together as a Civil Engineering community to reflect, connect, and celebrate our shared achievements. Whether it's the excitement of groundbreaking innovations, the satisfaction of completing a well-designed project, or the camaraderie built through collaboration, there's something truly special about being part of a profession that shapes the world around us.*



# DEPARTMENT DYNAMICS

## CIVIL ENGINEERING LECTURE SERIES



*The Civil Engineering Department launched the Lecture Series on Civil Engineering 2023 in collaboration with the Research and Development Group. The first talk, on "Introduction to Earthquake Engineering," was delivered by Dr. Shreyasvi Chandrasekhar from Italy on 23rd February. Covering seismic hazards, emergency preparedness, and recent earthquakes, the session was attended by 70 students and faculty. Organized by Dr. Yajneshwaran B and Dr. Sreya M V, it was highly informative and engaging.*

*The Department of Civil Engineering, in association with the Research and Development Group, organized the second technical talk on 8th March at SJEC. Mr. Alwyn Mendonca, HSE Consultant and Trainer from Dubai, delivered an insightful session on "The Scope of HSE in Civil Engineering and Introduction to IOSH & NEBOSH Training." He emphasized the critical role of HSE standards in preventing accidents on construction sites. The event, coordinated by Dr. Sreya M V and Dr. Yajneshwaran B, saw the participation of 110 students and faculty from various streams. It was highly informative and engaging.*



## Alumni Echoes



St Joseph excelled in providing a strong foundation through exceptional teaching of fundamentals. The curriculum emphasized hands-on experience, allowing students to tackle real-world problems and learn valuable lessons. This approach, combined with a supportive faculty and vibrant campus atmosphere, created an enriching environment that fostered significant academic and personal growth. The institution played a crucial role in transforming my aspirations into tangible achievements, equipping me with the skills and knowledge needed to turn my dreams into reality.

**Aditya S**

CV - Batch of 2019

Ph.D. Scholar, National Institute of Technology Karnataka

# DEPARTMENT DYNAMICS

## WORKSHOPS AND TECHNICAL TALKS



A three-day workshop was organized for final-year Civil Engineering students to enhance their practical skills and industry readiness. The first two days focused on 3D Structural Analysis using ETABS, where students learned to model structures, apply loads as per Indian codes, and design members under expert guidance. On the third day, sessions included microbiology lab training and a corrosion workshop. Students explored lab techniques and microbe identification, followed by an in-depth understanding of corrosion types, prevention methods, and repair techniques essential for structural durability.

A one-day hands-on training session on "PCB Design and Fabrication using KiCad Software" was conducted on 5th June 2023 for third-year EEE and Civil Engineering students. Organized by the Departments of EEE and Civil Engineering in collaboration with SJEC AICTE Idea Lab and IEEE SJEC Student Chapter-PES, the session was led by final-year EEE students Mr. Rajath Kumar and Mr. Manoj Kulal. Participants learned schematic creation, component placement, and PCB fabrication techniques. The training enhanced students' practical skills in PCB design for academic and mini-project applications.



The Department of Civil Engineering inaugurated the student club SHILPA and hosted a "Meet the Author" event on 15th June 2023 as part of the Lecture Series on Civil Engineering 2023, in collaboration with the Library and Learning Group. Renowned author and former NITK HOD, Prof. S.S. Bhavikatti, was the Chief Guest. He delivered an inspiring talk on textbook writing and appreciated student-made models showcased in the department museum. The event, attended by around 200 students and faculty, was coordinated by Dr. Yajneshwaran B, Dr. Sreya M V, and Ms. Vishikha Keshava. It was a memorable and enriching experience for all.

Civil Engineering shapes the world we live in, building strong foundations that support thriving communities now and for generations to come.



## DEPARTMENT DYNAMICS

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*A three-day workshop on Concrete Mix Design using IS 10262-2019 - Theory & Practice was conducted from 11th to 13th August 2023 at Kalam Auditorium for final-year Civil Engineering students. Coordinated by Ms. Pranamya K and Mr. Bhojaraja M, the sessions were led by Mr. Nagesh Puttaswamy from Concroc. The workshop offered an in-depth understanding of concrete mix design, combining theoretical concepts with hands-on experience, and proved highly beneficial for students entering the civil engineering profession.*

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*The Idea Lab Open Day for PU students of St. Elizabeth Convent School, Kasaragod, Kerala, was held on 21 November 2023 and coordinated by Dr Yajneshwaran B and Dr ESTR Chandra Sekhar B. The event took place at the AICTE Idea Lab and aimed to inspire young minds by exposing them to innovative ideas and cutting-edge technologies, fostering a culture of creativity and innovation.*



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*Many ancient cities were marvels of engineering, showcasing advanced planning, construction techniques, and infrastructure that continue to inspire modern civil engineering. Whether you're studying historical developments, designing sustainable cities, or reflecting on the past, it's important to approach ancient urban planning with respect and appreciation for the ingenuity of early engineers.*

## DEPARTMENT DYNAMICS

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*The Workshop on Modern Formwork and Scaffolding Technologies was held on 21 November 2023, coordinated by Ms. Pranamya K and Mr. Sachin U. Targeted at third-year Civil Engineering students, the event took place at Prerana Hall and was led by Mr. Sandeep Verma. This workshop provided valuable insights into the latest advancements in formwork and scaffolding, helping students improve their practical skills and prepare for industry demands.*

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*The Workshop on Pipeline Design and Fittings was held on 25 November 2023, coordinated by Mr. Chitharanjan M and Mr. Ajeeth B. Targeted at third-year Civil Engineering students, the event took place at Prerana Hall and was led by Mr. H. D. Chandrashekar. This workshop provided students with practical knowledge and hands-on experience in pipeline design and fittings, equipping them with essential skills for their future civil engineering careers.*



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*The world relies on what civil engineers design but never notices it — until it fails.  
Be the one who builds to last.*



# EXTENSIVE SURVEY CAMP 2023

*BLOOM WHERE YOU ARE  
PLANTED.*



*The Extensive Survey Camp is a cornerstone experience for civil engineering students, providing immersive, hands-on training in the essential skills of land measurement, data collection, and mapping. Through this intensive field exercise, students translate classroom concepts into real-world applications, gaining confidence in using surveying instruments and interpreting terrain.*

This camp not only hones technical precision but also fosters teamwork, critical thinking, and problem-solving under authentic site conditions. It serves as a vital bridge connecting academic learning with industry-ready expertise, preparing future engineers to design and build with accuracy and insight. By engaging directly with the environment they will shape, students deepen their understanding of Civil Engineering fundamentals and develop the foundation for responsible, innovative infrastructure development.

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## CIVIL ENGINEERING STUDENTS' ASSOCIATION – NIRMAN

*BLOOM WHERE YOU ARE PLANTED.*

*The inauguration of the Civil Engineering Students Association – NIRMAN was held on 06 January 2024, coordinated by Mr. Chitharanjan M. This significant event marked the launch of a dedicated platform to empower Civil Engineering students through academic enrichment, technical skill-building, and active community involvement. NIRMAN aims to serve as a bridge between classroom learning and industry exposure by organizing technical events, workshops, field visits, and outreach activities. The inauguration set the tone for a vibrant year ahead, fostering leadership, innovation, and collaboration among budding civil engineers at SJEC.*



# SkillBridge Visit

PREPARING TODAY'S STUDENTS FOR  
TOMORROW'S CHALLENGES



On 6th April 2023, the second-year Civil Engineering students of SJEC embarked on an industrial visit to the Varahi Underground Power House located in Hosangadi, Udipi.

Organized by faculty members Mr. Rohith Prakash Veigas and Ms. Vishikha Keshava, the visit offered students a firsthand look at one of India's most advanced hydroelectric power stations, boasting a total capacity of 240 MW.

Situated inside a mountain, the power house is renowned for its unique underground design and efficient engineering..

The visit began with an informative session by the officials, who provided insights into the plant's history, construction, and operation. neering students, providing them with a valuable platform to explore and understand various career opportunities, advanced academic programs, and industry tren

Students were given a guided tour through key sections of the facility, including the powerhouse chamber, transformer hall, control room, and switchyard. They observed the complete process of hydroelectric power generation and learned about various turbines, their maintenance, and the extensive safety protocols employed to ensure operational safety and worker protection.





# SkillBridge Visit

PREPARING TODAY'S STUDENTS FOR  
TOMORROW'S CHALLENGES



On June 9th, 2023, the Civil Engineering Department hosted an enlightening event focused on advancing students' knowledge of modern construction technologies. Expertly coordinated by Ms. Vishikha Keshava, Ms. Reena James, Mr. Rodrigues, and Mr. Chitharanjan M, the program highlighted the latest trends in precast building members, alternative materials, and eco-friendly building solutions.

As the construction industry rapidly evolves, the event served as a timely platform for students to engage with sustainable building practices that prioritize efficiency and environmental responsibility. Through immersive presentations and discussions, attendees discovered how precast components are revolutionizing construction by reducing time, enhancing quality, and minimizing waste.

The visit began with an informative session by the officials, who provided insights into the plant's history, construction, and operation. neering students, providing them with a valuable platform to explore and understand various career opportunities, advanced academic programs, and industry tren

The coordinators ensured a seamless and impactful experience, inspiring students to embrace cutting-edge techniques that will shape the future of civil engineering. This event reaffirms the department's dedication to equipping its students with practical insights and skills that meet the demands of an evolving industry.



# ST JOSEPH ENGINEERING COLLEGE (AN AUTONOMOUS INSTITUTION)

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*Affiliated to VTU, Belagavi and recognised by the AICTE, New Delhi.*

*Accredited by NBA, New Delhi*

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