

CIVIL CHRONICLES

The official newsletter of the department of civil engineering

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Vision: To grow as a globally recognized centre in Civil Engineering with a focus on innovation and research by combining technical and ethical qualities.

Mission M1: Professional Skills

To provide a better environment to encourage innovative and research thinking among students.

M2: Life-Long Learning

Instill in students contemporary knowledge in order to achieve academic and professional excellence with global perspective through experience of lifelong learning.

M3: Engage with Society

Impart a sense of community responsibility and leadership qualities to better meet the challenges of sustainable growth.



PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

PO1 Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2 Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3 Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4 Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5 Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7 Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8 Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9 Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10 Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11 Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12 Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



The National Techno Cultural Fest : X-tasy 2024



X-tasy 2024, the **National Techno Cultural Fest**, held on April 17th to 19th, 2024, at St Thomas College of Engineering and Technology, featuring a vibrant array of technical competitions, cultural performances, leaving behind a legacy of creativity, and memories to cherish, and setting a benchmark for future editions. The festival was graced by the presence of our esteemed Chief Guest, Dr. M Rajesh, Senior Regional Director, IGNOU

X-tasy 2024, a National Techno Cultural Fest, was held from 17th to 19th April, featuring an impressive array of over 50 events, with a **total prize worth of ₹150,000!**

The technical competitions were a highlight of the festival, with events such as Wizard, Cad Mania, Open Sim Sim, Built Xtra, Terraria, Project High Rise, Podium, Arkrete, and Tower Takedown. These events tested students' technical knowledge, problem-solving skills, and creativity, and were judged by industry experts and faculty members.

• Technical Competitions:

Wizard:

A technical quiz held on April 18th, with up to 40 KTU activity points and a **prize worth ₹3,000**, that tested students' knowledge in civil engineering, with a focus on construction technology, materials science, and structural analysis.

Cad Mania: An AutoCAD design competition held on April 17th where students had to create innovative designs using computer-aided drafting software.

Open Sim Sim: A treasure hunt held on April 17th that required students to solve puzzles and clues related to civil engineering concepts.

Built Xtra: A bridge-making competition held on April 17 where students had to design and build bridges using different materials and techniques.

Terraria: An adventure meet held on April 18th where students had to navigate through obstacle courses and challenges related to civil engineering.

Project High Rise: A waste model-making competition held on April 19th where students had to create models using recycled materials.

Podium: A technical debate held on April 19th where students had to discuss and argue on topics related to civil engineering and construction.

Arkrete: An arch-making competition held on April 18th where students had to design and build arches by using brick.

Tower Takedown: A Jenga challenge held on April 19th where students had to build and demolish towers by using jenga blocks.

• Non-Technical Competitions:

Face Painting: A creative activity where students had to paint their faces with different designs and patterns.

Nadan Pattu: A traditional Kerala folk song competition where students had to sing and perform folk songs.

Nostalgia: A trip down memory lane where students had to create and perform skits and dances based on retro themes.

Catch The Vibe: A music and dance competition where students had to perform to different genres of music.

Cinematic Dance: A dance competition where students had to perform dances inspired by movies.

Mehandi Design: A henna art competition where students had to create intricate designs using henna.

Photography: A photography competition where students had to capture and showcase their best shots.

Fancy Dress: A costume competition where students had to dress up in creative and innovative costumes.

Synchronous Dance: A synchronized group dance competition where students had to perform in groups.

Spot Dance: An impromptu dance competition where students had to dance to random music.

Overall, X-tasy 2024 was a vibrant and unforgettable experience that brought together students, faculty members, and industry experts in a celebration of creativity, innovation, and technical excellence. The festival set a benchmark for future editions and left behind a legacy of memories to cherish.

WORKSHOP ON CONSTRUCTION TECHNOLOGIES IN CIVIL ENGINEERING AS PER NBC GUIDELINES



Group photo of participants and staffs



Mr. K.V Dhanamjayan

An informative workshop conducted on 18th April 2024. Innovative construction technologies in civil engineering, conforming to NBC guidelines, was led by the esteemed Mr. K.V. Dhanamjayan, retired Executive Engineer, CPWD, leveraging his vast expertise to enlighten participants. This program coordinated by Mr. Nigil M, Assistant Professor From STM.

Advanced BIM Course Launched in Collaboration with KTU

In a groundbreaking collaboration between our civil department and the APJ Abdul Kalam Technological University (KTU), a specialized class on Building Information Modelling (BIM) has been launched. This 40-day intensive course started on 13th March 2024, which aims to equip students with advanced skills in BIM technology, a crucial component in modern architectural and engineering practices. This program underscores a commitment to providing students with cutting-edge education in emerging technologies. By joining forces, the institutions leverage their respective expertise to offer a comprehensive curriculum tailored to industry demands. Led by our esteemed professors S. Arun Kumar, Akshara K Anil and Manasa Mukundan, the class delves into the intricacies of BIM, covering topics ranging from 3D modelling

and visualization to project coordination and documentation. Through a combination of lectures, hands-on exercises, and realworld case studies, students gain practical insights into BIM implementation across various construction projects. The majority of the class sessions take place in the CAD lab, providing students with a conducive learning environment equipped with state-of-the-art facilities. However, the final two days of the course offers a unique opportunity for students to enhance their skills further at the CADD Centre in Kannur.

Upon completion of the BIM class, students can expect to emerge as proficient BIM practitioners capable of meeting the evolving demands of the AEC (Architecture, Engineering, and Construction) industry.

Equipped with sought-after skills in BIM technology, graduates gain a competitive edge in the job market and well-positioned to pursue rewarding career opportunities in architecture, engineering, and construction firms. This collaboration underscores a shared commitment to fostering innovation and excellence in education. By empowering students with advanced skills in BIM technology, the institutions prepare the next generation of industry leaders to drive transformative change in the built environment.



Placement Offers



Abhijith K P of S8 CE placed at AARBEE Structures Pvt Ltd



ACHIEVEMENTS



Dr. Arun Kumar Selvarajan receiving the BIM training certificate from the Vice Chancellor at the function held at KTU.

BIM

Dr. Arun Kumar Selvarajan has successfully completed the training on Building Information Modeling from 27th November to 18th December 2023.

PLACEMENT OFFERS



Anusree V got selected in ESAF Small Finance Bank



Fathima Jumina T N & Hiba Fathima N M got selected in ESAF Small Finance Bank

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1:

To solve engineering problems related to civil engineering by systematic techniques, skills and tools to meet the ever- growing needs of sustainable infrastructural development.

PSO2:

Design and build civil engineering-based systems in the context of structural, geotechnical, transportation and environmental requisites.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1:

Achieve excellence in the professional practices of civil engineering by utilizing the acquired knowledge and technical skills supported by modern day tools

PEO2:

Participation in decision making and nation building by adopting energy efficient and sustainable practices in civil engineering

PEO3:

Encourage innovative thinking and entrepreneurship through research and higher studies in advanced areas of civil engineering



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