

CIVIL CRONICLES

The official newsletter of department of civil engineering

Staff Editors: Asst. Prof. Vijila Balakrishnan
Asst.Prof. Jisna P

Student Editors: Rakhil A
Siktha K C
Keerthana P

Volume 2, Issue 2
ACADEMIC YEAR 2023-24



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 the academic and the professional excellence with global perspective through the experience of lifelong learning.

M3: Engage with Society

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

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

From Theory to Practice: AutoCAD Workshop Triumphs

03/10/2023



Students and staffs participated in AutoCAD workshop

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.

In a bid to enhance the practical skills of its students, SATTVA, the Civil Engineering Association at St. Thomas College of Engineering and Technology, organized a comprehensive one-day AutoCAD workshop on October 3, 2023. Aimed at enriching the academic experience of Second Year B.Tech. Semester III students, the workshop unfolded in the CAD Lab, offering a practical insight into the intricacies of AutoCAD. The workshop, led by esteemed faculty members Dr. Arun Kumar Selvarajan, Ms. Manasa Mukundan, and Ms. Jisna P, catered to 35 enthusiastic participants.

The comprehensive curriculum of the AutoCAD Workshop was meticulously aligned with the course contents of the Civil Engineering Planning and Drafting Lab, a crucial component of Semester III.

The sessions delved into fundamental concepts and practical applications, equipping students with essential skills for their academic and professional journeys.

The Proceedings commenced with an inaugural address by Ms. Vijila Balakrishnan, Head of the Civil Engineering Department, setting the tone for an engaging and educative day.

The core focus of the workshop was to familiarize students with AutoCAD's basic tools and commands. Under the guidance of the experienced instructors, participants actively engaged in hands-on exercises, honing their

proficiency in drawing tools such as lines, circles, and arcs and exploring various methods of utilization. The instructors systematically navigated through the modification tools, elucidating techniques like move, mirror, rotate, offset, and more. Practical sessions were seamlessly integrated into the workshop, allowing students to apply their newfound knowledge to creating intricate objects using both drawing and modification tools.

Certificates of participation were awarded to all 35 students, acknowledging their commitment to advancing their skills. SAATVA and the Civil Engineering Department expressed satisfaction with the workshop's success, reaffirming their dedication to providing holistic education that extends beyond traditional classroom learning. In conclusion, the SAATVA-organized AutoCAD Workshop served as a testament to

the institution's commitment to nurturing well-rounded, skilled professionals, ensuring that students are well-prepared for the challenges of the rapidly evolving field of technology and engineering.

Civil Engineering Faculty Honoured with Teaching Excellence Awards at Annual College Induction Ceremony August 21,2023



Teaching Excellence Awards for the academic year 2022-2023 have been officially announced, recognizing the outstanding contribution of faculty members from the Department of Civil Engineering. The accolades were conferred upon four distinguished educator, namely Mrs. Deepthi K., Mrs. Anu George, Mrs. Vijila Balakrishnan, and Mrs. Jean Mary Jacob, for their commendable academic achievements.

The awards were presented during a ceremony held on August 21, 2023, in conjunction with the college induction program. The event served as a platform to honour the

exceptional dedication and results-oriented efforts exhibited by these faculty members in the realm of academia.

The esteemed college principal, Mr. Shinu Mathew John, took the opportunity to express his admiration for the department's remarkable academic performance. His words of praise resonated throughout the function, acknowledging the relentless pursuit of excellence by the Department of Civil Engineering.

The ceremony witnessed the participation of faculty members and students from various branches,

creating an atmosphere of celebration and camaraderie. The collective applause from the attendees underscored the significance of the department's commitment to academic excellence.

SATTVA and St. Thomas College Illuminate the Path to Mastery in Soil-Structure Interaction

September 4,2023



Expert talk conducted on topic soil structure interaction



In collaboration with Sattva, the Civil Engineering Department of St. Thomas College of Engineering & Technology hosted an insightful expert talk on Soil Structure Interaction (SSI) on Monday, September 4, 2023. The event provided a platform for students to gain valuable insights from Dr. Rameesha T. V., a distinguished Scientist B at KSCSTE- NATPAC (Kerala State Council for Science, Technology, and Environment National Transportation Planning and Research Centre). Dr. Rameesha T. V., an eminent figure in the field of geotechnical engineering, delivered a comprehensive and enlightening presentation to the eager audiences comprising students from the 7th and 5th semesters of the Civil Engineering department. The talk aimed to enhance the students' understanding of the critical aspects of soil structure interaction, a pivotal element in civil engineering design and construction.

Soil - Structure Interaction (SSI) is the interaction between the soil and a structure founded on it. It is an important consideration in the design of structures, especially those located in seismic zones. SSI can have a significant impact on the structural response to dynamic loads, such as earthquakes and wind. This program is dedicated to exploring the intricate dynamics of soil-structure interaction in seismic engineering, with a special focus on its relevance and impact in Cochin Harbour. SSI is a critical factor in evaluating how seismic ground motion affects the stability and safety of structures. This program delves deep into SSI analysis, offering a comprehensive understanding and showcasing its real-world applications through a case study in the dynamic environment of Cochin Harbour. The expert elucidated on various aspects of soil structure interaction, covering the fundamental principles of SSI, insightful analysis of the Cochin Harbour case study, highlighting SSI's significance in the maritime environment, application of innovative SSI analysis techniques to real-world challenges, practical takeaways and recommendation for engineers and designers involved in coastal infrastructure real-world application, and the latest advancements in the field. With a focus on practical implication, Dr. Rameesha shared her extensive knowledge and experiences, providing attendees with a comprehensive understanding of how soil characteristics influence the behaviour of structures. The participants had the opportunity to delve into topics, and the interactive session fostered a stimulating environment, allowing for meaningful discussions and the exchange of ideas between the expert and the audience.

The event concluded with a vibrant Q&A session where students had the opportunity to seek clarifications and delve deeper into specific aspects of the topic. The collaborative effort between the college and Sattva in organizing this expert talk reflects the commitment of educational institutions to providing holistic learning experiences for their students. The expert talk on soil structure interaction not only broadened the horizons of knowledge for the attendees but also reinforced the college's dedication to offering enriching academic programs that align with industry trends and advancements. Such initiatives contribute to the overall development of students, preparing them for the challenges and opportunities in the ever-evolving field of civil

Convocation of 2019-23 civil engineering batch



Embarking on a Journey of Excellence: Celebrating the Convocation of the 2019-23 Batch Civil

Civil Department toppers, 2019 - 23 batch



Adithya K



Anagha K



Jinsha M

Placement offers



Adithya K, Akash P & Nandhana K T got selected in ESAF Small Finance Bank



Vishnu Prasad P, Ananya Rajeevan & Devapriya M K got selected in Real One Infrastructure



Afra Fathima & Aardra Anil got selected in Intellipat Software Pvt.Ltd

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.



St Thomas College of Engineering and Technology
Sivapuram, PO Mattanur, Kannur 670702