

CIVIL CHRONICLES

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St. Thomas College and NATPAC Collaborate for Road Safety: A Two-Day Training Program for Youth Leadership and Awareness

02/02/2024 - 03/02/2024

In association with Civil Department at St. Thomas College of Engineering & Technology, Kannur, the National Transportation Planning and Research Centre (NATPAC) orchestrated a comprehensive two-day training program aimed at enhancing road safety awareness and fostering youth leadership in advocating safe road behaviors. The event, held on February 2nd & 3rd, 2024, aligned with the National Road Safety Month 2024 campaign, seeking to engage the younger generation and educational bus drivers in initiatives towards creating safer road environments.

On first day, February 2nd, program kicked off with an inaugural ceremony that set the tone for the days ahead. The event was inaugurated by chief guest Mujib C U, Regional Transport Officer, RTO Enforcement, Kannur. The event commenced with a welcome address by Nigil M, HOD Administration, Civil Department, STM. The overview of the program was given by V S Sanjay Kumar, Principal Scientist, NATPAC. Felicitation was done by Dr. Shinu Mathew John, Principal, STM and Er. Rijo Thomas Jose, CEO, STM and the inaugural ceremony was concluded by Shijith P P, Junior Scientist, NATPAC. Felicitation was done by Dr. Shinu Mathew John, Principal, STM and Er. Rijo Thomas Jose, CEO, STM and the inaugural ceremony was concluded by Shijith P P, Junior Scientist, NATPAC by expressing vote of thanks.

The training program comprised four technical sessions, each focusing on different aspects of road safety and leadership. Participants gained insights into road crash statistics, accident prevention strategies, understanding of road regulations, and basic first aid for accident injuries.



Inauguration of training program on "Road safety and youth leadership" conducted by NATPAC in association with civil department, STM

The first session was handled by Shijith PP, Junior Scientist, NATPAC. He initiated the program by providing an overview of the day's agenda and outlining the key contents. He dove into the grim realities of road crashes, emphasizing the alarming death rates associated with them. This session set the tone for the importance of the subsequent discussions on road safety.

The second session was handled by V S Sanjay Kumar, Principal Scientist, NATPAC. He conducted an engaging session where he extensively discussed various aspects of accidents, including types, causes, and prevention strategies. He explained the role of engineers in ensuring safe road systems. He also actively involved participants through interactive questioning, making the session both informative and stimulating. Participants were encouraged to share their personal experiences with road accidents, fostering an open dialogue.

The third session was by Shyjan P, AMVI, RTO Enforcement, Kannur. This session centered on familiarizing participants with road rules and regulations. Shyjan P encouraged active participation by eliciting students' knowledge of existing rules before expanding on crucial regulations.

At last Dr. Jinesh concluded the program by shedding light on different accident injuries and imparting knowledge on how to effectively respond to them. He dispelled common superstitions surrounding first aid practices, providing participants with practical skills to administer aid in emergency situations. He reminded that our safety comes first before anything. The session was characterized by its blend of fun and educational content, leaving participants equipped with valuable first aid knowledge. Finally, the day ended with certificate being provided to students.



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.



Technical Session 1 handled by Shijith P P, Junior Scientist, NATPAC on first day



Technical Session 2 handled by V S Sanjay Kumar, Principal Scientist, NATPAC on first day



Technical Session 3 handled by Shyjan P, AMVI, RTO Enforcement, Kannur on first day



Technical Session 4 handled by Dr. Jinesh, HOD, Dept of Emergency Medicine, Aster Mims hospital, Kannur on first day



Technical Session 1 handled by Shijith P P, Junior Scientist, NATPAC on second day



Technical Session 2 handled by Nithin V R, Asst. Motor Vehicle Inspector (AMVI), RTO Enforcement, Kannur on second day



Technical Session 3 handled by Dr. Akhil, HOD of Emergency Medicine at Aster Mims Hospital, Kannur on second day

On second day, three sessions were conducted for bus drivers to enhance their awareness and understanding of pertinent rules, regulations and best practices in road safety. Shijith P P, Junior Scientist, NATPAC, initiated the program by providing an overview of the day's agenda and outlining the key contents. He dove into the grim realities of road crashes, emphasizing the alarming death rates associated with them. He also showed different graphs and figures depicting these death rates. This session set the tone for the importance of the subsequent discussions on road safety. Additionally, a quiz was conducted to assess the drivers' understanding of basic road rules and regulations. This interactive section set the tone for the subsequent session and ensured active participations from the drivers. Session 2 was handled by Nithin V R, Asst. Motor Vehicle

Inspector (AMVI) from RTO Enforcement, Kannur. This session focused on imparting knowledge about road safety rules and guidelines. Through the use of slides depicting various real-life scenarios, drivers were educated on how to navigate different situations on the road. The session was highly interactive, allowing drivers to engage with the content and understanding the practical application of road safety principles. Finally, the program ended with the session facilitated by Dr. Akhil, HOD of Emergency Medicine at Aster Mims Hospital, Kannur, provided vital information on emergency medical procedures. Drivers were educated on the precautions and first aid measures to be taken in the event of a medical emergency, particularly in crash-related incidents. Practical demonstrations using dummies were

conducted to enhance understanding and provisions in performing CPR and other lifesaving techniques.

The collaboration between NATPAC and St. Thomas College exemplifies a proactive approach towards addressing road safety challenges through education, awareness, and community engagement.

By harnessing the collective efforts of stakeholders and nurturing the leadership potential of youth, initiatives like these are instrumental in creating safer road environments and reducing road-related accidents and fatalities.

As the National Road Safety Month 2024 campaign continues to gain momentum, such collaborative endeavors serve as a beacon of hope, inspiring individuals and communities to take proactive steps towards building a safer and more sustainable future on our roads.



Road Safety Awareness Workshop, Day 2; Group pic of participants, volunteers and staff

Civil Department of St. Thomas College Collaborates with NATPAC to Conduct Parking Survey in Thalassery City

12/02/2024

In a collaborative effort aimed at addressing parking challenges and improving urban mobility in Thalassery City, the Civil Department of St. Thomas College of Engineering & Technology, Kannur, in partnership with the National Transportation Planning and Research Centre (NATPAC), conducted a two-week comprehensive parking survey which was starting on February 12, 2024. Spearheaded by Shaheem S., Principal Scientist and Head of NATPAC, the survey involved 30 enthusiastic students from St. Thomas College.

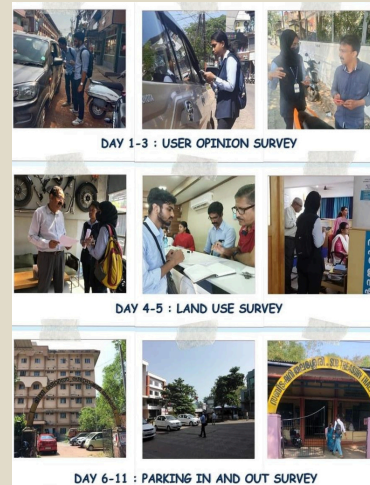
The survey, conducted over a span of several days, focused on gathering crucial data regarding parking patterns, user opinions, and land use in various municipal wards of Thalassery City. The meticulous planning and execution of the survey underscored the commitment of both the Civil Department and NATPAC towards addressing pressing urban transportation issues.

Divided into three distinct types, namely the user opinion survey, the land use survey, and the in-out survey, the comprehensive approach aimed to provide a holistic understanding

of the parking dynamics within the city. Students meticulously documented their findings, ensuring accuracy and reliability in the collected data.

The survey covered several key locations across Thalassery City, including prominent municipal wards such as Kuzhippangade, Kayyath, Mattambram, Maariyamma, and the Town Hall area. By encompassing diverse geographical areas, the survey aimed to capture the nuances of parking behaviour and preferences across different parts of the city.

The user opinion survey solicited feedback from residents and visitors regarding their parking experiences, preferences, and challenges faced while navigating parking facilities within the city. This valuable input served as a crucial indicator of public perception and satisfaction levels regarding existing parking infrastructure. Simultaneously, the land use survey involved mapping out the various types of land usage in designated areas, shedding light on the availability of parking spaces demand generated by commercial, residential, and recreational activities.



Students from St. Thomas College of Engineering and Technology conducting parking survey at thalassery city in collaboration with NATPAC

Lastly, the in-out survey involved monitoring the flow of vehicles entering and exiting specific parking areas, providing insights into utilization patterns and peak traffic hours. This real-time data proved invaluable in identifying congestion hotspots and formulating targeted strategies for traffic management and parking optimization.

The collaboration between the Civil Department of St. Thomas College and NATPAC exemplifies a proactive approach towards

addressing urban transportation challenges through data-driven analysis and community engagement.

The successful completion of the parking survey in Thalassery City lays the foundation for evidencebased policymaking and infrastructure development initiatives aimed at enhancing mobility, reducing congestion, and fostering sustainable urban growth.

A the findings of the survey are analyzed and synthesized, stakeholders can look forward to actionable insights and recommendations that will pave the way for tangible improvements in the parking ecosystem of Thalassery City, ultimately enhancing the quality of life for its residents and visitors alike.

Beyond the Classroom: SATTVA organizes hands-on training on Total Station.

04/12/2023

The Department of Civil Engineering, in collaboration with SATTVA, the Civil Engineering Association, organized a comprehensive training session on Total Station for semester 3 students, which was held on December 4, 2023.

The resource person for the training was Mr. Sijo M. Santhosh, an assistant surveyor from Alison Informatics Pvt. Ltd. With a wealth of experience in the field, Mr. Santhosh shared his expertise and insights with the eager students, offering them a unique opportunity to enhance their skills in surveying technology.

The training program was meticulously planned, covering both theoretical and practical aspects of working with Total Station equipment. The theory sessions were conducted in Seminar Hall 1, providing students with a solid understanding of the principles and applications of Total Station technology

The practical demonstrations, held in the Survey Lab, allowed students to apply their newfound knowledge in a hands-on setting.

The day-long event commenced at 10:15 am and concluded at 4:15 pm, ensuring an immersive and comprehensive learning experience for all participants. The targeted audience for this training was the semester 3 students, who benefited immensely from the practical exposure and insights shared by Mr. Sijo M. Santhosh.

The faculty in charge of overseeing the training was Assistant Professor T.V. Chandni, who played a pivotal role in coordinating the event and ensuring its success. Professor Chandni expressed her satisfaction with the turnout and the enthusiasm displayed by the students throughout the training.

Total Station technology is a critical component in modern surveying and civil engineering practices, and the training session aimed to equip students with the necessary skills to excel in their academic and professional pursuits.



Training session on total station

The collaboration Between the department of civil engineering and SATTVA reflects a commitment to providing students with opportunities for practical learning and industry exposure. The success of the Total Station training program highlights the department's dedication to fostering a wellrounded education that goes beyond traditional classroom teaching

As the semester progresses, the Department of Civil Engineering looks forward to organizing more such collaborative initiatives, providing students with a platform to bridge the gap between academia and industry practices.

Achievements



Mr. Mohammed Zahin PM, got selected in the KTU F Zone team to compete in KTU Interzonal Table Tennis Championship..

Zahin represented the college in the Table tennis men's team STM at KTU F Zone table tennis tournament held at Govt College of Engineering Kannur on 29/10/2023. The Men's team secured third place from all the matches therein. At the KTU Interzonal Table Tennis Tournament, held at FISAT Angamaly, on 02/11/2023, the team represented by Zahin won till the quarter finals.

Technical Exhibition at Sree Sankara Vidya Peetam, Draws Attention of Engineering Enthusiasts

07/12/2023 - 09/12/2023

The technical exhibition conducted at Sree Sankara Vidya Peetam, Senior Secondary School in Mattannur turned out to be a resounding success, attracting students, educators, and enthusiasts alike. Organized over three days from December 7th to December 9th, the event showcased a plethora of innovative projects and cutting-edge technology. Notably, students from St. Thomas College of Engineering & Technology actively participated, enriching the exhibition with their insightful contributions.

One of the highlights of the exhibition was the impressive display by the students from the Civil Engineering Department at STM. Fathima Jumina, Siktha K C, and Anusree V from S8 CE captivated the audience by introducing various civil-based instruments. Fathima Jumina elucidated on the chain used for chain survey,

while Siktha K C and Anusree V demonstrated the functionalities of the dumpy level and theodolite, respectively showcasing their adeptness in handling advanced surveying equipment.

Further enhancing the exhibition's educational value, Nandaswaroop, Abhinav, Shahabas, Shabeeb and Amegha, from S6 CE presented differentsized sieves utilized in sieve analysis, offering insights into the intricacies of material characterization in civil engineering applications. The technological prowess of STM's civil engineering students were further showcased through a comprehensive overview of various civil-related software. Sariga Jayaraj, Rakhil A, Pradul P, and Adwaith R, from S8 CE elucidated on the working principles and provided practical examples of software tools such as AutoCAD, Revit, ETABS, Green Building Studio, and Twinmotion, demonstrating their proficiency in utilizing modern digital tools in civil engineering design and analysis.

Placement Offers



Aardra Anil, Afra Fathima and Hiba Fathima placed at Intellipat



Anusree V, Hiba Fathima and Fathima Jumina T N got selected in ESAF Microfinance and Investments Pvt. Ltd.



Fathima Jumina T N and Hiba Fathima got selected in Sutherland



Students explaining their exhibits

One of the notable aspects of the exhibition was the commendable effort by STM students in addressing queries & their comprehensive understanding and ability to communicate complex engineering concepts contributed significantly to the success of the event, leaving attendees impressed and inspired. In conclusion, the technical exhibition at Sree Sankara Vidya Peetam Senior Secondary School served as a platform for knowledge exchange, collaboration, and innovation, showcasing the bright future of engineering and technology.

The participation of STM students, particularly from the Civil Engineering Department, played a pivotal role in elevating the event's stature and making it a memorable experience for all involved.

Achievements



Mrs. Vijila Balakrishnan has been successfully completed NPTEL course on topic Geotechnical engineering laboratory and Outcome based pedagogic principles for effective teaching



Dr. S Arun Kumar has been successfully completed NPTEL course on topic Wastewater treatment and recycling Plastic waste management



Ms. Roopa Balakrishnan has been successfully completed NPTEL course on topic Geotechnical engineering laboratory



Ms. Deepthi K has been successfully completed NPTEL course on topic Geotechnical engineering laboratory

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.

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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