

COLLEGE OF ENGINEERING ,TRIVANDRUM



ASCE CET MAGAZINE

“FOUNDATIONS OF PROGRESS, PILLARS OF INNOVATION”

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AMERICAN SOCIETY OF CIVIL ENGINEERS CET



ASCE

American Society of Civil Engineers


STUDENT CHAPTER

College of Engineering Trivandrum

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 American Society of Civil Engineers CET

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FROM THE EDITORIAL DESK

With great pride and enthusiasm, we present this edition of the ASCE CET Student Chapter Magazine—a reflection of the passion, creativity, and commitment that define our civil engineering community. This publication is more than just pages of text; it is a collective voice of our journey, highlighting the achievements, events, and tireless efforts of students who are shaping the future of infrastructure and innovation.

We extend our heartfelt thanks to our advisors, contributors, and the entire ASCE family whose support made this publication possible. May this magazine inspire its readers, celebrate our progress, and encourage all to continue building—not just structures, but ideas, values, and lasting impact.

Happy Reading!



OVERVIEW

WHY ASCE?

The ASCE CET Student Chapter proudly represents a dynamic community of over 300 student members, each actively enrolled as members of the ASCE at the national level. Over the past year, the chapter has made significant strides in enriching the academic and professional journeys of its members.

A series of strategic panel discussions guided key planning and decision-making processes, ensuring a student-driven and impactful approach. To enhance practical exposure, the chapter organized field visits, interactive webinars, and technical workshops, offering students real-world insights into modern civil engineering practices.

Members also took part in competitions and collaborative events that sharpened their technical abilities, encouraged innovation, and strengthened teamwork. Through these initiatives, the chapter continues to foster industry readiness, leadership, and a strong professional identity among the civil engineers of tomorrow.

The ASCE Student Chapter unites passionate civil engineering students, dedicated to advancing knowledge, innovation, and professional excellence. More than just a student group, it serves as a crucial bridge between academic learning and industry application, offering enriching experiences through technical workshops, expert lectures, site visits, and collaborative events.

The chapter is committed to nurturing leadership, teamwork, and ethical values, empowering students to grow into responsible and capable professionals. By engaging with industry leaders, participating in national-level events, and expanding their professional networks, members gain practical exposure and valuable insights that prepare them for success in the ever-evolving field of civil engineering.

VISION

To nurture civil engineering students to become future civil engineering leaders to serve the society

MISSION

To foster student members from the fundamental to wider engineering knowledge. To adapt them with a broad set of skills and technical know how on the fields of emerging technologies and new developments in professional practices. To develop leadership and inquisitive attitude for creating innovative solutions to serve the society

THE MENTORS WHO INSPIRE US



Faculty Advisor
Dr. Anusha SP



Practitioner Advisor
Dr. Kishor P



Practitioner Advisor
Dr. Abhijith S

Behind every successful initiative of the ASCE CET Student Chapter stands the unwavering support of our dedicated advisors. Their visionary guidance, deep knowledge, and consistent encouragement have been the driving force behind our growth and achievements.

From shaping our goals to refining our ideas, their mentorship has helped us navigate challenges and embrace opportunities. Their belief in our abilities has motivated us to aim higher, think deeper, and lead with purpose. We are truly grateful for their commitment, wisdom, and constant presence, which continue to inspire us to pursue excellence, integrity, and innovation in everything we do as future civil engineers.

WITH GRATITUDE TO OUR GUIDES

"The ASCE CET Student Chapter has become a beacon of excellence, innovation, and professionalism. I commend the dedication and vision of the student team and faculty mentors in creating a vibrant platform for aspiring civil engineers. Through its many initiatives, the club not only enhances technical learning but also instills values of leadership, collaboration, and service. I am proud of their contributions and confident they will continue shaping a stronger future for the profession and society alike."

Dr. Suresh Babu V
Principal, CET

"It gives me immense pride to see the ASCE CET Student Chapter growing as a dynamic and impactful community within our department. The club's continuous efforts to bring practical exposure, technical learning, and professional engagement to our students are commendable. I deeply appreciate the commitment of our students and faculty advisors in making this chapter a model of excellence and industry readiness."

Dr. Mini Soman
Head of Dept.

"Guiding the ASCE CET Student Chapter has been a rewarding experience. I have witnessed firsthand the energy, creativity, and resilience of our students as they work to connect classroom learning with real-world civil engineering. Their passion for innovation and teamwork is truly inspiring. I extend my heartfelt appreciation to each member for their efforts in upholding the values and vision of ASCE."

Faculty Advisor
Dr. Anusha SP

It is an honor to serve as the President of the ASCE CET Student Chapter, a community where passion for civil engineering meets opportunity, collaboration, and innovation. Over the past year, our chapter has grown not just in numbers but in spirit, initiative, and impact. Through technical events, workshops, field visits, and national-level participation, we have created a platform that empowers students to bridge the gap between theory and practice. Every achievement is the result of teamwork, mentorship, and the drive to push beyond boundaries.

President
ASCE CET STUDENT CHAPTER



DRIVEN BY PURPOSE, DEFINED BY GOALS



Strengthening Engagement and Community

To build a more inclusive and vibrant student community, the ASCE CET Student Chapter set a clear objective: to actively involve all civil engineering students and boost chapter membership. Aiming for a 30% increase from the previous year, the team launched a strategic action plan that included an engaging orientation session and a focused membership drive targeting first-year students.

These initiatives successfully raised awareness about the chapter's opportunities and benefits. As a result, the chapter recorded a remarkable 25% increase in membership, marking a strong step forward in fostering broader participation and laying the groundwork for continued growth and engagement.

Imparting Skills for Academic & Industrial Excellence

With a commitment to enhancing both academic performance and industry readiness, the ASCE CET Student Chapter set out to empower students with the skills and knowledge essential for success in civil engineering. The goal was not only to support technical learning but also to identify individual strengths and provide targeted growth opportunities.

To achieve this, the chapter launched a series of focused initiatives—ranging from hands-on workshops and student competitions to expert-led sessions and a field site visit. These efforts culminated in a dynamic and enriching learning environment

Expanding Networks, Bridging Academia and Industry

To effectively bridge the gap between academic learning and industry practices, the ASCE CET Student Chapter placed strong emphasis on broadening its professional network and creating valuable connections with industry leaders and subject matter experts. This goal aimed to expose students to real-world civil engineering practices and broaden their professional outlook.

TALK SESSIONS

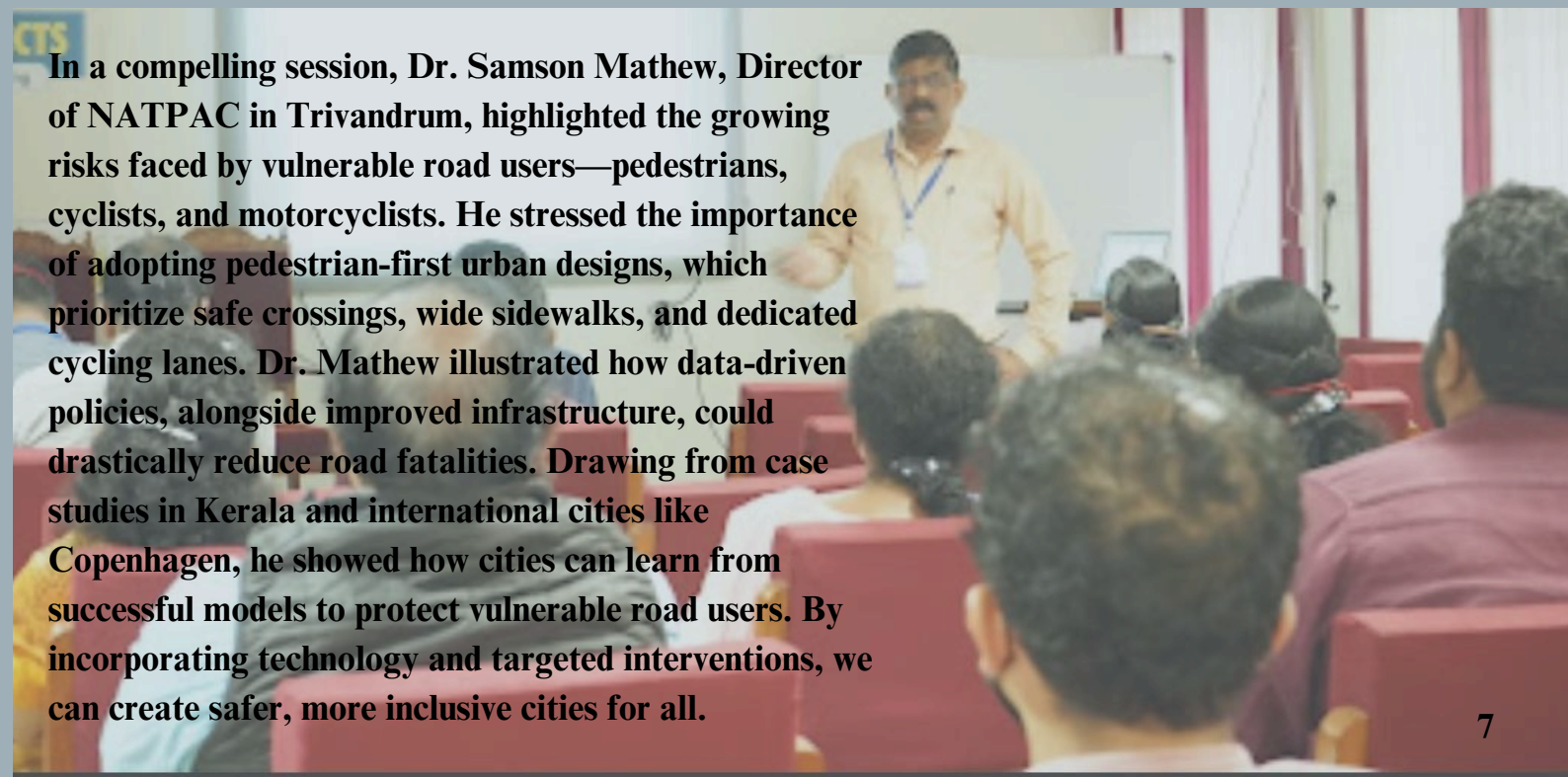
1. DRIVING CHANGE: EXPERT INSIGHTS ON INNOVATING ROAD SAFETY

To raise awareness and share technical insights on road safety, ASCE organized an Expert Talk Session featuring distinguished speakers from top Indian institutions. The event, held in a hybrid format, brought together M.Tech students, faculty, and professionals from the transportation engineering field.

The session focused on key aspects of road safety, including innovative design solutions, research-driven policies, and strategies to protect vulnerable road users. Experts emphasized the role of technology, data analytics, and smart infrastructure in making roads safer. The talks offered valuable perspectives on improving traffic management and ensuring safer environments for pedestrians, cyclists, and motorists alike.


Overall, the event highlighted the importance of collaboration between researchers, engineers, and policymakers in creating safer roadways and advancing road safety through research and innovation.

2. DESIGNING SAFER STREETS: PRIORITIZING VULNERABLE ROAD USERS FOR A SAFER FUTURE



In a compelling session, Dr. Samson Mathew, Director of NATPAC in Trivandrum, highlighted the growing risks faced by vulnerable road users—pedestrians, cyclists, and motorcyclists. He stressed the importance of adopting pedestrian-first urban designs, which prioritize safe crossings, wide sidewalks, and dedicated cycling lanes. Dr. Mathew illustrated how data-driven policies, alongside improved infrastructure, could drastically reduce road fatalities. Drawing from case studies in Kerala and international cities like Copenhagen, he showed how cities can learn from successful models to protect vulnerable road users. By incorporating technology and targeted interventions, we can create safer, more inclusive cities for all.

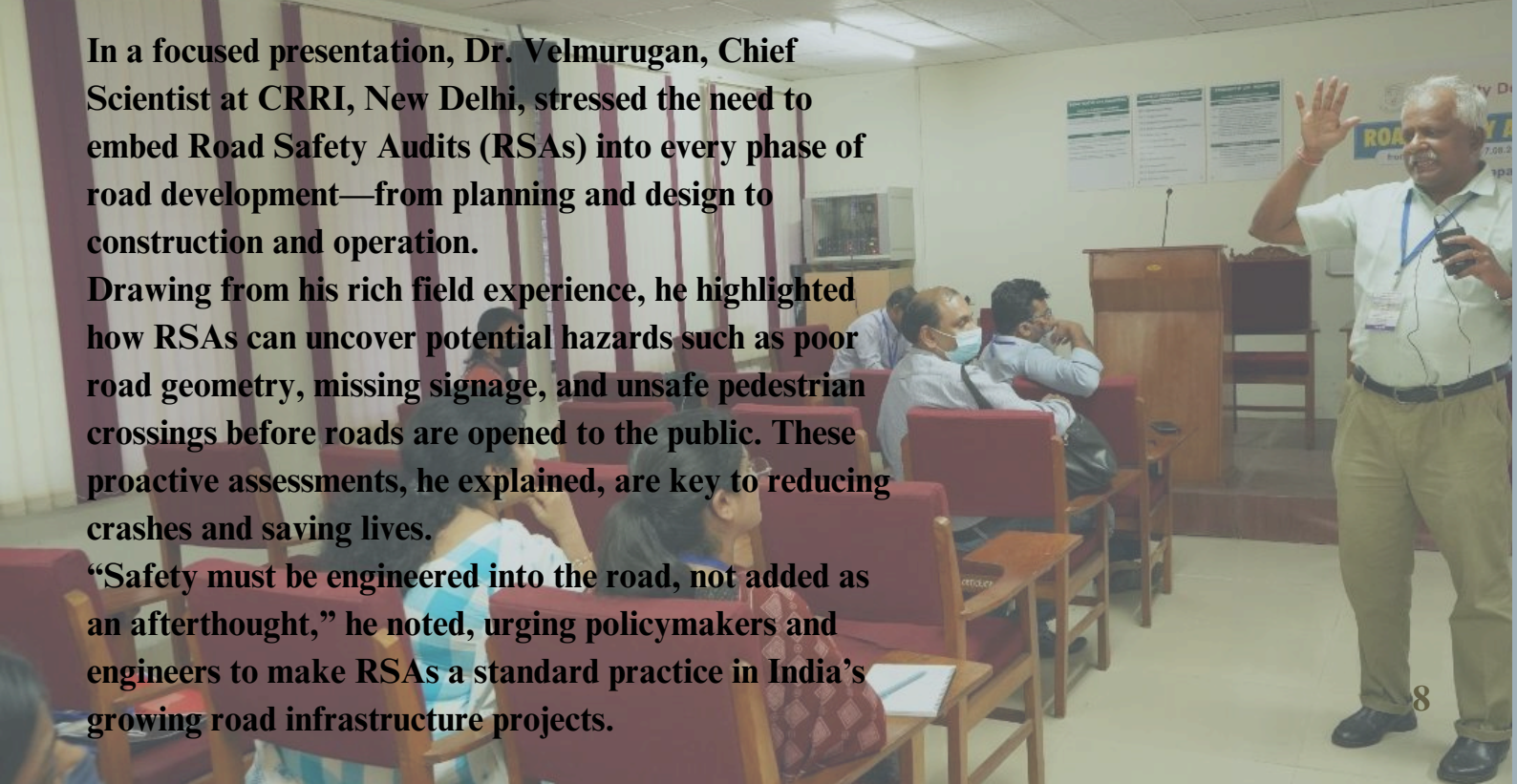
3. DESIGN STAGE SAFETY AUDIT: PROACTIVE SAFETY IN ROAD PLANNING

A photograph showing Dr. S. Arkatkar, an Associate Professor at SVNIT Surat, standing and speaking to a seated audience in a lecture hall. The audience members are wearing masks and listening attentively.

In a highly informative session, Dr. S. Arkatkar, Associate Professor at SVNIT Surat, delved into the critical concept of the Design Stage Safety Audit (DSSA). He emphasized the importance of integrating safety measures right from the planning phase of road design. By assessing factors such as intersections, road curvature, and lane width, engineers can identify potential crash risks before construction begins.

Dr. Arkatkar urged young engineers to prioritize proactive safety—thinking ahead to prevent accidents—rather than relying on reactive fixes once roads are already in use. His session was a strong reminder that well-thought-out design choices can significantly reduce road safety issues, making roads safer for everyone.

4. DESIGNING SAFER ROADS: DR. VELMURUGAN ADVOCATES FOR ROAD SAFETY AUDITS

A photograph showing Dr. Velmurugan, Chief Scientist at CRRI, New Delhi, standing and presenting to a seated audience in a lecture hall. He is gesturing with his right hand while holding a microphone in his left. The audience members are wearing masks and listening attentively.

In a focused presentation, Dr. Velmurugan, Chief Scientist at CRRI, New Delhi, stressed the need to embed Road Safety Audits (RSAs) into every phase of road development—from planning and design to construction and operation.

Drawing from his rich field experience, he highlighted how RSAs can uncover potential hazards such as poor road geometry, missing signage, and unsafe pedestrian crossings before roads are opened to the public. These proactive assessments, he explained, are key to reducing crashes and saving lives.

“Safety must be engineered into the road, not added as an afterthought,” he noted, urging policymakers and engineers to make RSAs a standard practice in India’s growing road infrastructure projects.



5. THE SCIENCE OF CRASH INVESTIGATION: DR. K. RAVINDER ON UNDERSTANDING ACCIDENTS

In a riveting session, Dr. K. Ravinder, Principal Scientist at CRRI, New Delhi, delved into the intricate science behind crash investigation. Using real-world accident data, he walked the audience through the process of crash reconstruction, emphasizing how it helps identify key factors—human error, vehicular design flaws, and environmental conditions—that contribute to accidents.

Dr. Ravinder also highlighted the role of forensics in accident analysis, explaining how it provides crucial insights into accident causation. He underscored that systematic crash investigations not only help improve road safety engineering but also offer legal clarity, guiding policy reforms and liability assessments.

“Understanding the true cause of an accident leads to smarter solutions, better road designs, and fewer fatalities,” Dr. Ravinder concluded, advocating for more investment in forensic investigation as a key tool for future road safety.

The Expert Talk Session proved to be a power-packed knowledge-sharing platform that reinforced the urgent need for a multi-disciplinary approach to road safety. From user behavior and infrastructure design to forensic investigations, the talks bridged theory and practice. Students left inspired to contribute to safer roads through innovation, audits, and ethical engineering.



STUDENT COMPETITIONS

The academic year at the College of Engineering Thiruvananthapuram (CET) was marked not just by lectures and lab sessions, but also by vibrant student-led competitions that combined creativity, intellect, and social consciousness. These events provided platforms for students to express ideas, raise awareness, and celebrate the spirit of innovation and inclusion.

POSTER MAKING COMPETITION - WORLD ENVIRONMENT DAY (JUNE 5)

To mark World Environment Day, the ASCE Student Chapter and the Nature Club jointly organized a poster making competition that saw enthusiastic participation from students across all departments. The theme for 2025, "Land Restoration, Desertification, and Drought Resilience," inspired students to explore critical environmental issues through powerful visual storytelling. Posters reflected urgent calls for sustainable living, biodiversity preservation, and climate action. The top entries were displayed on campus and shared through social media, encouraging wider awareness and engagement.



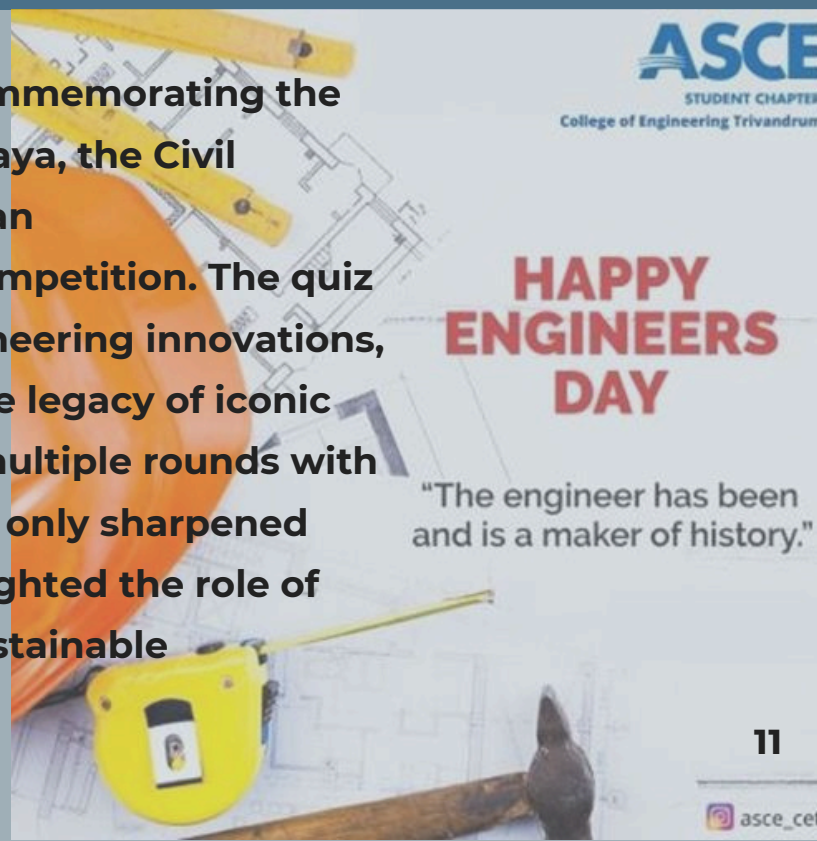
POSTER MAKING COMPETITION - INTERNATIONAL DAY OF PERSONS WITH DISABILITIES (DECEMBER 3)



Inclusivity and empathy took center stage during the poster making competition conducted to observe the International Day of Persons with Disabilities. Students conveyed themes such as accessibility, equity, and empowerment for people with disabilities through thoughtful artwork. The competition emphasized the importance of inclusive design in engineering and encouraged students to consider how their future innovations could serve every member of society. The best entries were exhibited in common areas on campus, sparking conversations on empathy, equality, and universal design.

QUIZ COMPETITION - ENGINEERS' DAY (SEPTEMBER 15)

In celebration of Engineers' Day, commemorating the birth anniversary of Sir M. Visvesvaraya, the Civil Engineering Association organized an interdepartmental technical quiz competition. The quiz tested students' knowledge in engineering innovations, infrastructure, sustainability, and the legacy of iconic engineers. Teams battled through multiple rounds with precision and energy. The event not only sharpened technical knowledge but also highlighted the role of engineers in nation-building and sustainable development.



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"BRIDGING KNOWLEDGE: A VIRTUAL PLATFORM FOR RESEARCH EXCELLENCE"

The ASCE Student Chapter at CET organized a virtual paper presentation event for M.Tech students on January 29, 2025. The event aimed to provide a platform for postgraduate students to showcase their ongoing research and gain constructive feedback from peers and faculty members. The session fostered an environment of academic collaboration and knowledge exchange.

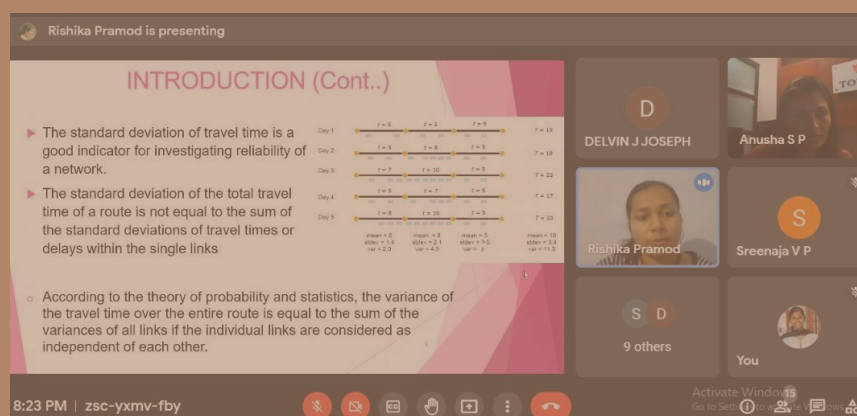
M.Tech students from Structural Engineering, Geotechnical, Environmental, and Transportation specializations attended the session. Presentations were followed by Q&A sessions.

Constructive critiques and suggestions for improvement were provided by faculty.

The event successfully created a collaborative learning environment. Students received valuable insights into research methodologies, academic writing, and presentation techniques.

The ASCE Student Chapter at CET continues to promote academic excellence and innovation through such research-oriented activities. The paper presentation on January 29, 2025, was a significant step in nurturing young researchers and enhancing CET's research culture.

The event also served as a unique networking opportunity, encouraging interdisciplinary dialogue among students from various specializations. It not only helped participants build confidence in presenting technical content but also inspired a culture of curiosity and continuous improvement. By engaging in peer discussions and receiving expert evaluations, students were motivated to pursue higher standards in their academic and research pursuits.



SAVING LIVES, ONE DROP AT A TIME: BLOOD DONATION CAMP AT CET

In a remarkable demonstration of social responsibility and compassion, a Community Service Blood Donation Camp was organized on December 8, 2021, near CETAA Hall, from 9:00 AM to 1:00 PM. The event saw enthusiastic participation from students, faculty, and staff, all united by a common goal — to make a difference in the lives of those in need.

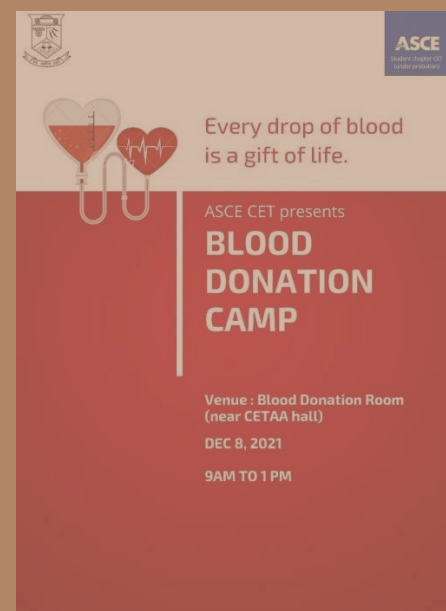
The camp was conducted in collaboration with local healthcare organizations and was part of CET's ongoing efforts to foster a spirit of community service among its members. Medical professionals ensured that all safety and hygiene protocols were strictly followed, making the donation process smooth, safe, and efficient.

Volunteers assisted throughout the event, guiding donors, managing registrations, and spreading awareness about the importance of regular blood donation. The collected blood units were directed to nearby hospitals and blood banks, where they would support emergency treatments, surgeries, and patients battling critical illnesses.

The camp not only highlighted the life-saving impact of blood donation but also inspired many first-time donors to become regular contributors to this noble cause. It was a powerful reminder that small acts of kindness, like donating blood, can have a profound impact on countless lives.

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Through initiatives like this, CET continues to strengthen its commitment to community engagement, empathy, and social responsibility



A NEW CHAPTER BEGINS: INAUGURATION OF ASCE STUDENT CHAPTER AT CET

The inaugural ceremony of the ASCE Student Chapter at CET was held with great enthusiasm and pride on September 27, 2022. This milestone event marked the official beginning of the student chapter's journey towards fostering academic excellence, innovation, and professional growth in the field of civil engineering.

The inauguration was graced by Dr. Rajasree M.S, former Vice Chancellor of APJ Abdul Kalam Technological University, who presided over the event as the chief guest. In her address, Dr. Rajasree emphasized the importance of such professional bodies in shaping the future of engineering students and urged them to actively engage in research, leadership, and collaboration.

The session was also addressed by Dr. Anusha S.P, Faculty Advisor of the ASCE Student Chapter, who expressed her heartfelt gratitude for the opportunity to guide and support the student body. She shared her vision for the chapter's growth and introduced the newly appointed student office bearers, who would be leading the initiatives and activities of ASCE at CET.

The inauguration set a positive tone for the chapter's journey ahead, symbolizing a commitment to academic growth, leadership development, and community engagement. With the support of faculty and the enthusiasm of students, the ASCE Student Chapter at CET is poised to become a hub of learning, innovation, and collaboration in the civil engineering domain.



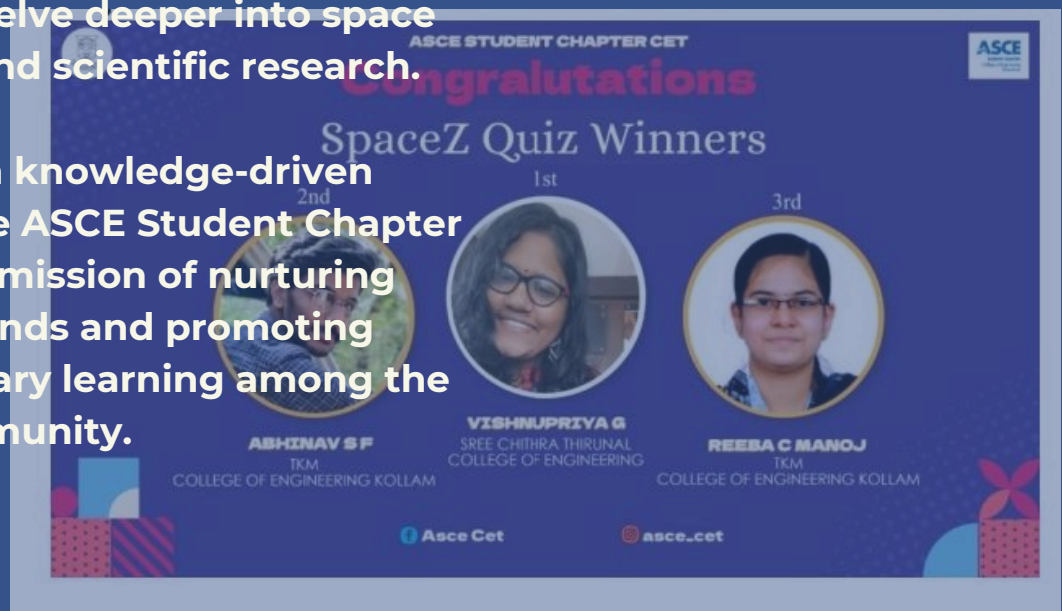
EXPLORING BEYOND: 'SPACEZ' ONLINE QUIZ IGNITES CURIOSITY ABOUT SPACE

On October 9, 2022, the ASCE Student Chapter at CET organized 'Spacez', an engaging online quiz competition centered around the theme of Astronomy and Space. The event aimed to spark interest and enhance awareness among students about the vast and fascinating realms beyond our planet.

The quiz brought together space enthusiasts from various academic backgrounds to test their knowledge on topics ranging from celestial bodies and space missions to scientific discoveries and astrophysics. With a carefully curated set of questions, the competition was designed not just to challenge, but also to educate and inspire.

The event witnessed active participation and healthy competition, with students showcasing impressive awareness and curiosity about space science. Beyond the contest, 'Spacez' served as a platform to encourage students to delve deeper into space exploration and scientific research.

Through such knowledge-driven initiatives, the ASCE Student Chapter continues its mission of nurturing inquisitive minds and promoting interdisciplinary learning among the student community.



CINEMATIC JOURNEY THROUGH SPACE: MOVIE SCREENING IN CELEBRATION OF WORLD SPACE WEEK

As part of the World Space Week celebrations, the ASCE Student Chapter at CET organized a special movie screening of Gravity on October 10, 2022. The event aimed to combine education with entertainment, offering students a visual exploration of the challenges and wonders of outer space.

The movie, known for its stunning visuals and intense depiction of life in space, captivated the audience and sparked meaningful conversations about space technology, survival in orbit, and the reality behind space missions.

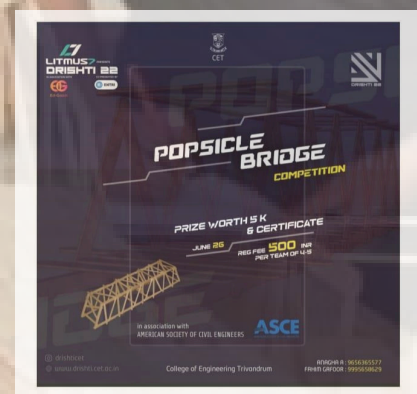
The screening not only provided a break from routine academics but also deepened students' interest in space sciences and astronomy. It was a perfect complement to the theme of World Space Week, reinforcing the significance of space exploration in an engaging format.

Through initiatives like this, the ASCE Student Chapter continues to foster curiosity and broaden learning beyond traditional classrooms.

ENGINEERING IN MINIATURE: POPSICLE BRIDGE COMPETITION AT DRISHTI 2022

As part of the annual tech-fest Drishti 2022, the ASCE Student Chapter at College of Engineering, Trivandrum organized a unique and hands-on event — the Popsicle Bridge Competition — on June 26, 2022. The competition challenged participants to apply structural engineering concepts creatively by designing and constructing model bridges using only popsicle sticks and wood glue.

Participants had to complete their designs within a fixed time limit, focusing on both aesthetics and structural integrity. The excitement peaked when the finished bridges were put to the test through incremental loading until failure, evaluating their strength, stability, and efficiency.



The event proved to be a thrilling experience for all involved, providing a platform to showcase engineering knowledge, teamwork, problem-solving, and practical application of theoretical concepts. The participants demonstrated remarkable ingenuity, and the competition highlighted the importance of innovation in structural design.

The Popsicle Bridge Competition was a resounding success, leaving the audience inspired and the participants more confident in their engineering skills. Events like these reinforce CET's commitment to fostering experiential learning and creative thinking among future engineers.

HANDS-ON SYNERGY: PANTHEON MASH-UP WORKSHOP BLENDS GEOTECHNICAL AND MATERIAL TESTING

As part of Pantheon 7.0, the ASCE Student Chapter at College of Engineering, Trivandrum hosted an innovative and interactive event — the Pantheon Mash-Up — on April 29, 2022. This unique initiative brought together two vital domains of civil engineering in a combined workshop on Geotechnical and Material Testing.

The mash-up format provided participants with the rare opportunity to explore and engage with both areas simultaneously, offering a comprehensive, hands-on learning experience. Students delved into soil mechanics, bearing capacity analysis, and testing techniques in the geotechnical segment, while the material testing session focused on evaluating properties of construction materials like concrete, cement, and aggregates.

This interdisciplinary approach allowed participants to broaden their technical understanding, appreciate the interplay between different civil engineering branches, and gain practical skills that extend beyond textbook learning.

The Pantheon Mash-Up was met with enthusiastic participation and positive feedback, highlighting the value of blending concepts to enhance learning outcomes. The event stood as a testament to CET's ongoing commitment to innovative education and industry-relevant skill development.





AUTOCLASH: THE ULTIMATE CIVIL ENGINEERING SHOWDOWN AT PANTHEON 8.0

As part of Pantheon 8.0, the ASCE Student Chapter at College of Engineering, Trivandrum conducted AUTOCLASH, a thrilling and competitive event held on November 19, 2022, designed to challenge and showcase the core skills of budding civil engineers.

Billed as the ultimate competition for civil engineering students, AUTOCLASH focused primarily on testing surveying techniques and engineering drawing skills — two fundamental aspects of the profession. Participants were put through a series of demanding tasks that required precision, technical knowledge, and quick problem-solving under time constraints.

The event attracted enthusiastic participants from across departments, each eager to demonstrate their mastery of fieldwork and drafting. Whether it was accurate leveling or detailed plan preparation, AUTOCLASH proved to be a true test of both practical and theoretical understanding.

The competition fostered healthy rivalry, teamwork, and critical thinking, while also offering valuable exposure to real-world applications of classroom concepts. AUTOCLASH not only celebrated technical excellence but also encouraged students to refine essential engineering competencies.

Events like AUTOCLASH reinforce CET's dedication to nurturing industry-ready engineers equipped with both skills and confidence.



A YEAR IN REVIEW - ASCE CET STUDENT CHAPTER

As we turn the pages of another academic year, the ASCE CET Student Chapter reflects proudly on a journey filled with learning, innovation, and impactful engagement. This year has been a testament to the commitment, creativity, and collective spirit of our members as we continued to uphold the mission of shaping civil engineering excellence.

We strengthened ties with industry professionals through guest lectures and LinkedIn outreach efforts. These engagements inspired members to envision their future roles in shaping infrastructure and solving real-world problems.

Despite staggered academic schedules and fluctuating calendars, the chapter thrived by fostering flexibility, team coordination, and continuous motivation across batches.

The coming year holds even greater promise—with planned site visits, advanced workshops, and a renewed focus on research, leadership, and interdisciplinary collaboration. Together, we aim to elevate our chapter's impact within and beyond the campus.

THANK YOU!

As we close this chapter and look back on a year filled with growth, learning, and collaboration, we extend our heartfelt gratitude to everyone who made this journey remarkable.

To our faculty advisors and mentors — your unwavering support, insightful guidance, and encouragement have been the backbone of all our initiatives.

To the student members — your enthusiasm, dedication, and team spirit brought our vision to life and gave strength to every step we took.

To our alumni, guest speakers, and industry professionals — thank you for sharing your time and experience with us, helping bridge the gap between academics and the real world.

And to our institution — for providing us with the platform and resources to grow not only as engineers but also as responsible individuals and future leaders.

This year wouldn't have been the same without each of you. With gratitude in our hearts, we look forward to another year of innovation, impact, and inspiration.

– ASCE CET Student Chapter