

**FEDERAL INSTITUTE OF SCIENCE AND TECHNOLOGY
(FISAT)[®]
ICI STUDENTS CHAPTER
ANNUAL REPORT 2025**



DEPARTMENT OF CIVIL ENGINEERING

Authored by:

Dr. Kavitha P E, Professor and Head

Ms. Rinu J Achison, Assistant Professor (Sr. Grade)

Faculty Coordinators, ICI Student Chapter - FISAT

List of Activities

- 1. Techfest : INCEPTO'25 , 31st January 2025 and 1st February 2025**
- 2. Technical Talk - 2D & 3D Modelling Software, 18th February 2025**
- 3. Project Exhibition : AAVISHKAR 2025, 27th March 2025 to 4th April 2025**
- 4. International Conference : SECON'25, 4th June 2025 to 6th June 2025**
- 5. Site Visit : Open Stage Construction Site, FISAT, 17th July 2025**
- 6. Alumni Interaction : Mr. Aakash K Sambasivan, 25th July 2025**
- 7. Technical Talk : Building Permit Application using K-Smart, 16th September 2025**
- 8. Student Inauguration and Induction : Prarambh'25, 25th September 2025**

1. Techfest : INCEPTO'25

INCEPTO'25 was the two-day inter-college technical fest conducted by the Department of Civil Engineering on 31st January 2025 and 1st February 2025, showcasing student technical competitions, workshops, expert talks, and hands-on events designed to strengthen practical skills and professional exposure. The fest drew participants from several engineering colleges. The programme combined hands-on competitions, technical challenges, expert sessions and workshops to create an engaging learning environment.

Key Activities included:

- Technical Competitions: Geothon (geotechnical challenge), Cubix (concrete mix-design), Disaster Zone (disaster mitigation), Ideapitching, TimeCapsule, Brain Battle, Escape, Sandhwana and more.
- Workshops & Talks: Practical workshops and technical talks delivered by faculty and invited resource persons to bridge theory and practice.
- Demonstrations & Exhibits: Live demonstrations, lab sessions and project exhibits showcasing student innovation.

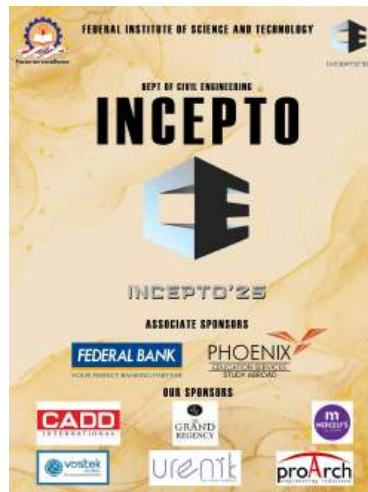
Over 100 students from approximately 10 engineering colleges across Kerala participated in the event. There was also a high campus participation with active student coordinators and volunteer teams. Media: There was a strong media visibility via FISAT and INCEPTO social channels. There was a successful execution of multidisciplinary, hands-on competitions that tested technical knowledge and practical skills which enhanced collaboration and networking among students from different colleges.

Technical competitions included:

- Geothon - multi-stage geotechnical challenge with ideation and final presentation
- Cubix - Mix-Design competition (concrete mix design)
- The Disaster Zone - disaster mitigation event.
- TimeCapsule - design a future ready building
- Ideapitching - Solving a Civil Engineering problem
- Brain Battle - Technical Quiz

The event was conducted on 31st January and 1st February 2025 under the leadership of Ms. Rinu J Achison, Mr. Abin Thomas C A and Mr. Abhijith R. The student coordinators were Mr. Albin Wilson and Ms. Nandhana Prasad.

The event also included a musical jamming session by “Make some Ocha”, a venture owned and operated by Ms. Divya S, an alumni of the Department.





2. Technical Talk - 2D & 3D Modelling Software

A technical talk on 2D drafting and 3D modelling software was conducted on 18th February 2025 during the post-lunch session. The session was organized for the final-year Civil Engineering students of various batches in association with Solid CAD, Kottayam. A total of 62 students attended the session. The session was led by Mr. Rahul Ramachandran, BIM Engineer and Director of Solid CAD, along with Mr. Abhishek P S, Technical Head at Solid CAD.

The resource persons provided a detailed overview of various drafting software commonly used in the civil engineering industry. The importance of AutoCAD and its relevance in modern design and construction practices were emphasized, followed by an introduction to AutoCAD 3D and its applications in creating three-dimensional models and visualizations.

The speakers also discussed the features and advantages of using SketchUp as a 3D modeling tool. In addition to the technical content, the students were briefed on the internship programs offered by Solid CAD, aimed at equipping them with practical skills and enhancing their industry readiness. The session was interactive and informative, offering valuable insights that connected academic learning with professional applications.

3. Project Exhibition : AAVISHKAR 2025

AAVISHKAR 2025 is the flagship project exhibition of the Department showcasing innovation and academic excellence of students from the final year B.Tech. Organised by the Association of Civil Engineers (ACE) and the American Society of Civil Engineers (ASCE) FISAT Student Chapter, the event provided a professional platform for final-year undergraduate students to present their academic projects and design innovations.

This year, Aavishkar 2025 featured a hybrid model of participation, encompassing both online and offline components. The event ran from 27th March 2025 to 4th April 2025

The Offline Exhibition was held on 27th March 2025 at the Civil Department Seminar Hall. Offline participants were required to submit an A3-sized poster for evaluation.

The website (<https://sites.google.com/fisat.ac.in/aavishkar2025/home>) showcased projects via two-minute videos. This portal was accessible to the public, including alumni and industry professionals, who could view and vote on projects.

The Projects covered diverse civil engineering fields, including Structural Engineering, Geotechnical Engineering, Transportation Engineering, Hydrology and Water Resource Engineering, Environmental Engineering, Construction Technology and Management and Sustainable Engineering.

The project Awards were thoughtfully categorised to recognise multiple dimensions of project excellence as the Best Project, Best Project with Social Relevance, Best Project with Industrial Relevance, Best Innovative Project, Best Video Presentation and Best Poster Presentation (exclusive to offline participants).





4. International Conference : SECON'25

The Department hosted the highly successful Sixth International Conference on Structural Engineering and Construction Management (SECON'25), held from June 4 to June 6, 2025. This flagship event, conducted in a hybrid mode to ensure greater accessibility and global engagement, served as a crucial platform for innovative research, knowledge exchange, and collaboration among civil engineering professionals, academics, and students worldwide.

At the heart of SECON'25 was its forward-thinking theme: "Deconstruction: The Key to Unlocking Circular Universe in Civil Engineering". This theme underscored the vital role of deconstruction - the careful disassembly and reuse of building components - in achieving a circular economy within the built environment. The "Civil Engineering's Circular Universe" paradigm aims to design out waste, keep materials in use, and regenerate natural systems, moving away from traditional linear practices to conserve resources, reduce carbon emissions, and minimise environmental impact.

A major highlight of SECON'25 was the commitment to knowledge dissemination, with selected high-quality papers set for publication in two volumes of the Scopus-indexed Lecture Notes in Civil Engineering series by Springer Nature. Springer Nature generously covered all publication-related expenses, ensuring free and wide access to impactful research outputs.

The inauguration of SECON'25 was held with great solemnity and enthusiasm. The highly anticipated inaugural address was delivered by Dr. Rahimi A. Rahman, Deputy Director of the Innovation and Commercialization Management Center and Associate Professor of Construction Project Management at Universiti Malaysia Pahang Al-Sultan Abdullah, who set the intellectual tone by contextualising the importance of the conference's theme on deconstruction and the circular economy. Dr. K. S. Anandh, Assistant Professor (Senior Grade) from SRM Institute of Science and Technology, delivered a guest address, reflecting on contemporary trends in structural engineering. Keynote sessions during the main conference delivered strategic insights into:

"Leveraging BIM and Digital Twins for Deconstruction: Strategies for Preparation and Optimization" by Dr. Rahimi A. Rahman.

"Assessment of Climate Change Impacts on Hydrological Extremes" by Dr. Chithra N. R..

"Subsurface Surprises Through Integrated Investigation for Structural Design" by Prof. P. Anbazhagan.



5. Site Visit : Open Stage Construction Site, FISAT

There are a few exciting new additions coming up on campus. The construction of the open stage is progressing steadily despite the heavy rains and is expected to be completed by mid-August. This project has provided our students with a valuable opportunity to witness and learn from a live construction process right here on campus. On 17th July 2025, the final-year B.Tech students of our department were given a guided tour of the open stage construction site.

About 55 students of the seventh semester actively participated in the event. They were proactively guided by assistant professors of the department Ms. Preethi M and Ms. Keerthi Sabu. The Civil Supervisor Mr. Jaison Joseph, technical staff of the department also accompanied them.

The open stage construction started on 10th June 2025 and is expected to be completed by 15th August 2025. On the day of the visit, foundation work was complete and superstructure construction commenced. Mr. Jaison Joseph detailed the structural plan of the building provided by the consultants. He conveyed that a thorough soil investigation was done and based on the soil properties and ground water table level, consultants recommended a raft foundation along with around 6 piles in a row.

He explained the scenario with a well-detailed structural plan incorporating appropriate pile foundation, slab layout, and reinforcement design. The pile layout, pile cap detailing, strip slab reinforcement, and cross-sectional details were briefly explained by Ms. Preethi M. Reinforcements for pilecap, curved strip slab and retaining wall were progressing in the site. Students were able to see the accurate transferring of water levels from the temporary bench mark provided by the workers on site.

It was conveyed to students that the open stage is planned to have two platforms in two levels. One for accommodating the light and sound equipment and the other for serving the purpose of the stage/elevated platform. The surface will be finished by kota stone flooring and sufficient weep holes will be provided for drainage. To achieve different elevations the excavated earth along with other soils are to be filled and compacted using vibratory rollers by properly monitoring the settlement. The position of theatrical stairs and ramps on either side of the stage were well explained to students. The ramps with granite finish and special curvature improves the aesthetics of the structure.

The students expressed their fulfilment and gratitude on detailing the construction of the much awaited Open stage construction in FISAT. Also, they mentioned their interest in visiting the same during its development stages as the work progresses.



6. Alumni Interaction : Mr. Aakash K Sambasivan

Civil House is the alumni interaction platform that our department has nurtured over the past couple of years. Many of our notable alumni have been part of civil house in the past. The first event of Civil house of this academic year was hosted on 25th July 2025. Mr. Akash K Samabasivan from the 2013-1017 B.Tech batch who is currently working with L&T Hydrocarbon as Senior Structural Engineer was the speaker. At L&T he was a part of many large scale projects like RHCU (IOCL) & Saudi Aramco

The session was conducted in online mode and about 43 participants joined the session. Aakash's session was inspiring and touched upon many aspects including career development, preparation of resume, the need for internships and what a student who aspires to become a civil engineer should do.

Aakash suggested learning project management, specifically in transport or construction, as it provides an insightful and fulfilling experience where one can identify areas for improvement. He also recommended trying an organizational work trial to see if it suits them.

He spoke about the advantages of internships of longer duration, as industry experience gained through such internships makes job applications more relevant than self-directed learning at home. He also explained that resumes of freshers should include basic information and tools known for analysis. He emphasised that for interviews, general skills and a basic understanding of tools from modelling to analysis are often sufficient, as companies typically provide further training. He also mentioned about open day conducted by CSIR-SERC, Chennai, where students can visit and interact with the staff to understand the latest research in civil engineering domain.

Prioritising learning in the initial three years of joining a firm, especially in construction consultancy or project management, is very important to facilitate career progression, according to him. He emphasized proactive learning and certifications to climb the career ladder easily within five years. Aakash k Sambasivan advised expressing thoughts to friends and family to overcome initial hesitations and then to consultants and engineers to discuss ideas early to be recognised and given opportunities gradually.

His advice to budding engineers was to look for jobs in companies like Samsung, LNT Samsung, Hyundai, Lampreel, Technip, Hitachi Energy, JGC, and TRL, which he noted are hiring a minimum of 700 engineers in a year.



FISAT FEDERAL INSTITUTE OF SCIENCE AND TECHNOLOGY

Department of Civil Engineering

CIVIL HOUSE
Connect.Chat.Inspire

AAKASH K SAMBASIVAN
Sr. Engineer - Civil Structural
LST Energy Hydrocarbon

25 July, 2025
09.30 AM
CIVIL Seminar Hall

Interactive Talk Session with Alumni
Exclusively for 4th Year Civil Engineering students

Google Meet

For queries contact:
9486344223 (Prasanth M)
928964385 (Asha Thomas)

An exclusive opportunity for the students of civil dept to interact and learn.

7. Technical Talk : Building Permit Application using K-Smart

Our department hosted a one day workshop on "Building Permission Application using KSMART" on September 16, 2025, from 9:30 AM to 4:00 PM. The session was handled by M.A. Muhammad Azhar, Structural Engineer and Managing Director of Team Anversons, Aluva.

KSMART (Kerala State Mapping, Application, and Research for Transformation) is a government initiative aimed at leveraging geospatial technologies for planning, development, and efficient governance across Kerala. It focuses on integrating mapping, data analysis, and research to support decision-making in sectors like infrastructure, environment, disaster management, and public services. The platform is used by civil engineers for building approvals, land use planning, and ensuring compliance with regulatory requirements.

The forenoon session, attended by 70 B.Tech final-year students, aimed to introduce the legal and procedural aspects of building permits in Kerala and equip students with practical knowledge of the KSMART digital platform.

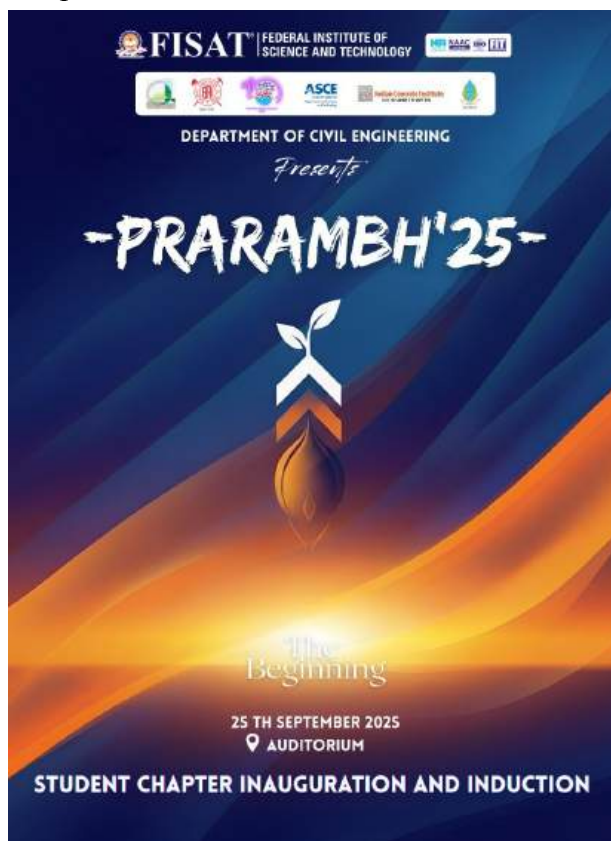
The afternoon session, designed for M.Tech students and faculty members, focused on preparing building drawings for submission on KSMART to obtain approval. Both sessions were highly informative, providing valuable insights into the application process.





8. Student Inauguration and Induction : Prarambh'25

Our department hosted the installation ceremony of office bearers of student chapters, ACE, ASCE, BAI, ICI, IGBC and IGS in grand event named PRARAMBH'25 on 25th September 2025. The event marked the beginning of another vibrant academic year filled with opportunities for leadership, innovation, and collaboration.



Dr. Elson John, Head of the Department of Civil Engineering, Mar Athanasius College of Engineering, Kothamangalam inaugurated the programme. His words inspired students to embrace opportunities in research and industry engagement. The Guest of Honour, Er. Abhilash Joy, Managing Director and Structural Consultant at Stuba Engineering Consultancy, addressed the gathering with valuable insights from professional practice and the five qualities that an engineer should possess.

Mr. Shimith P R, Chairman, Governing Body, FISAT, Dr. Jacob Thomas V, Principal, Dr. Mini P R, Vice Principal, and Dr. Unni Kartha G, Dean Academics, Dr. Kavitha P E, were also present on the stage and spoke on the occasion.

Mr. Abin Thomas C A, Convenor of PRARAMBH'25, briefed the audience about the objectives and activities of the student chapters, underscoring their role in bridging academia with industry. The much-awaited induction of office bearers of the various student chapters followed, formally entrusting leadership roles to the newly elected team. This was the highlight of the event.

