

SCHOOL OF CIVIL ENGINEERING (SCE)

VIT - A Place to Learn; A Chance to Grow

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Vision Statement of the School of Civil Engineering

To excel in Civil Engineering education and research with a global perspective and commitment to sustainability

Mission Statement of the School of Civil Engineering

M1. Academic Excellence: Impart high-quality Civil Engineering education through innovative teaching methodologies and modern laboratory facilities.

M2. Research: Promote research, consultancy, and innovation addressing real-world Civil Engineering challenges with emphasis on sustainable infrastructure and societal needs.

M3. Global Perspective & Industry Engagement: Prepare globally competent Civil Engineers through industry interaction and collaboration with national and international institutions.

M4. Ethics, Sustainability & Lifelong Learning: Produce socially responsible Civil Engineers with strong ethical values and leadership skills, dedicated to sustainable development and lifelong learning.

Program Educational Objectives (PEOs)

PEO1: Graduates will be successful civil engineering professionals / entrepreneurs.

PEO2: Graduates will pursue higher studies and research for professional development.

PEO3: Graduates will demonstrate civic responsibility in addressing societal and environmental challenges.

DEAN'S MESSAGE

From pioneering smart infrastructure solutions to designing resilient urban environments, our collective work is making a tangible difference in the real world. At the School of Civil Engineering (SCE), VIT, we build on this strong foundation while preparing our students to meet the changing needs of a rapidly evolving world.

It gives me immense pleasure to present this edition of the School of Civil Engineering Newsletter, showcasing the accomplishments and milestones of our faculty members and students. The past quarter has been marked by commendable achievements in teaching, research, innovation, and professional activities. I am particularly delighted to see our faculty and students continued to excel in academics, research, and co-curricular activities, bringing recognition and pride to the school. These accomplishments reflect the dedication, perseverance, and collaborative spirit of our faculty, staff, and students.

I extend my sincere thanks to everyone in the SCE community for your unwavering commitment, passion, and support. Together, we will continue to elevate SCE's legacy and embrace new opportunities for learning, innovation, and impact. I hope you all enjoy reading the updates and achievements of students and faculty members of SCE and extend your co-operation and support for all our future accomplishments

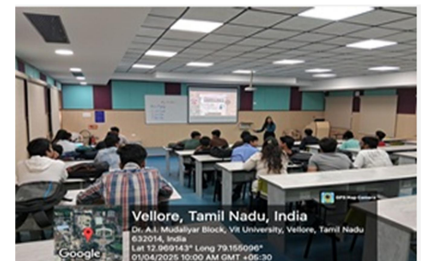
PATENTS

Dr. Dillip Kumar Barik, Ms. Ria Singhal and Mr. Harshit Sharma filed a patent titled “Portable Decentralized Filter for Greywater” on 27th April 2025.

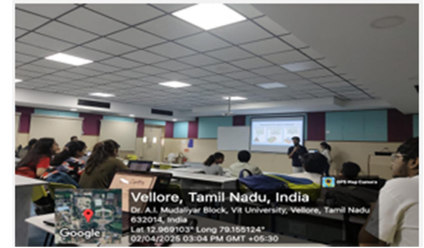
Dr. Prasanth S and Mr. Akarsh Aravind Kunwar published a patent titled “An Intelligent Air Quality Index (AQI) Monitoring System” on 31st May 2025.

NATIONAL/INTERNATIONAL EVENTS ORGANISED

1. Dr. Selvabalan, Scientist E, Central Water and Power Research Station, India, conducted a workshop titled 'Water Conservation Week 2025' from 1st April to 5th April 2025.
2. Dr. Balamurugan S organized “Fix the Flow” on 1st April 2025 as part of Water Conservation Week 2025 to promote awareness and innovative solutions for water conservation.
3. Dr. Sofi A organized “Dammed Decisions” on 2nd April 2025 where participants developed practical, scalable, and eco-friendly solutions to pressing water-related challenges.



4. Dr. Konala S K Karthik Reddy organized “Quake Resilient: Innovate for Water Security” on 2nd April 2025 which was an ideathon to encourage participants to develop innovative and practical solutions for ensuring water security in earthquake-prone areas.
5. Dr. Kumar K, Professor, VIT, and Dr. Surendar M, Associate Professor, VIT, conducted 'IDEATHON - For Research Scholars' from 3rd April to 4th April 2025.
6. “Reel Splash – Save Every Drop” was organized by Dr. Visuvasam J as part of Water Conservation Week on 5th April 2025 to raise awareness about the importance of water conservation through creative digital storytelling.
7. Dr. S. Vasanthakumar, Professor, VIT, and Dr. L. Vignesh Rajkumar, Assistant Professor, VIT, conducted an FDP titled 'An Introduction to LIDAR and its Applications for 3D Modelling' on 24th April 2025.
8. A management development programme titled "Continuing Professional Development of L&T Employees via UG Programme" was conducted from 16th May 2025 to 13th June 2025.
9. Dr. L. Vignesh Rajkumar, Assistant Professor, VIT, conducted a Summer Interns Programme titled 'Modelling Soil Erodibility from Environmental Covariates using ML for Soil Assessment in the Upper Ponnaiyar Basin'.



INDUSTRIAL VISIT

The Department of Civil Engineering organized an industrial visit to the RAMCO Cements Plant, Alathiyur, providing students with valuable exposure to modern cement manufacturing processes and quality control practices. Accompanied by Dr. Balamurugan S and Dr. OM Suganya, the students gained firsthand knowledge of raw material processing, clinker production, cement grinding, and sustainable manufacturing techniques. The visit successfully bridged the gap between classroom learning and industrial practice, enriching the students' understanding of cement technology and its real-world applications.



PUBLICATIONS

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- Salaimanimagudam, M. P., & Jayaprakash, J. (2025). Synergistic potential of topology optimization and lattice structures in concrete 3D printed beams. In *Structures* (Vol. 76, p. 108892). Elsevier.
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- Mishra, B., Shanmugapriya, T., Hsieh, S. H., Chang, Y. T., & Pal, A. (2025). BIM-based approach for analyzing carbon emissions of residential buildings in India. *Innovative Infrastructure Solutions*, 10(4), 153.
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- Janani, P., & Santhi, A. S. (2025). A study on the optimization of superplasticizer and water-to-binder ratio for enhancing 3D printable concrete with marble powder waste. *Advances in Science and Technology Research Journal*, 19(6).
- Prabakaran, V., & Akhas, P. K. (2025). Buckling behaviour of cold-formed steel channel section, sigma section, and built-up sigma section: Experimental and numerical study. *Advances in Science and Technology Research Journal*, 19(6), 342-352.
- Kiran Prabha, M., Vishnu Vardhan, K., Santhi, A. S., & Mohan Ganesh, G. (2025). Advancements in Self-Compacting Concrete Reinforced With Basalt Fiber: A Comprehensive Review. *Engineering Reports*, 7(5), e70147.
- Wani, S., Selvaraj, T., & Dhassiah, M. P. (2025). Metagenomic and mineralogical insights into biomineralization of shell lime putty prepared with fermented *Terminalia chebula* fruit extract for built heritage applications. *Cleaner Engineering and Technology*, 27, 101011.
- Suhas, V. S., Shanmugapriya, T., Borg, R. P., Akash, K., & Sunil, A. (2025). Enhanced corrosion inhibition of mild steel in concrete pore solution using modified MgO-chitosan epoxy nanocomposite coatings. *Materials Letters*, 138916.

OM, S. Optimizing UHPECC Properties Using MAA-Based Particle Packing Techniques with SCMs. *Frontiers in Built Environment*, 11, 1588145.

Kesavamoorthi R., & Mohan Ganesh G. (2025). Optimization of mixture proportions for self-compacting concrete using TOPSIS method. *International Journal of Applied Science and Engineering*.

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