



**KUMARAGURU**  
COLLEGE OF TECHNOLOGY  
Character is Life

**CIVIL  
ENGINEERING  
ASSOCIATION**



# BUILDERS EXPRESS

November – December 2022



## **ABOUT KCT:**



Kumaraguru College of Technology is an autonomous, self-financing engineering college, affiliated to Anna University. It was started in 1984, with the mission of providing aspiring students of technical education, a challenging learning environment. Over the last three decades, several new programs have been introduced and the institution has emerged as a trusted destination for quality technical education and as a hub for research and innovation. The college is ISO certified and is accredited by NAAC. Several programs offered by KCT are accredited by NBA. In addition to a host of engineering and allied engineering courses, KCT has also gained recognition for its uniquely tailored management education programs.

KCT prides itself as an institution that is quick to adapt its learning delivery platform to rapidly evolving learning environments. This has resulted in creating a vibrant ambience on campus that engages students in a variety of ways.



## **Vision of Institution**

The vision of the college is to become a technical university of International Standards through continuous improvement.

## **Mission of Institution**

Kumaraguru College of Technology (KCT) is committed to providing quality Education and Training in Engineering and Technology to prepare students for life and work equipping them to contribute to the technological, economic and social development of India. The College pursues excellence in providing training to develop a sense of professional responsibility, social and cultural awareness and set students on the path to leadership.

## **Vision of Department**

Department of Civil Engineering is striving to become as a world class Academic Centre for quality education and research in diverse areas of Civil Engineering, with a strong social commitment.

## **Missions of Department**

1. Producing highly competent and technologically capable professionals and motivated young Academicians
2. Providing quality education in undergraduate and post graduate levels, with strong emphasis on professional ethics and social commitment.
3. Developing a scholastic environment for the state – of –art research, resulting in practical applications.
4. Undertaking professional consultancy services in diverse areas of Civil Engineering.



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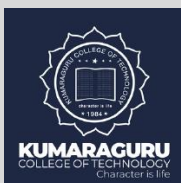
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### **Message from the Head of the Department:**

*"As the year draws to a close, the months of November and December have been marked by significant achievements. From impactful workshops to pioneering research and consultancy projects, the department continues to uphold its tradition of excellence. Let us look forward to the new year with renewed enthusiasm and innovation."*

— Dr. Selvan V

### **Programs Organized:**

1. **Workshop on Earthquake-Resistant Design**, Date: 15th November 2022. This hands-on workshop brought together 70 UG and PG students to explore the principles of earthquake-resistant structural design. Through interactive sessions and practical case studies, participants learned how to apply advanced engineering techniques to enhance building safety in seismic zones.
2. **National Conference on Civil Innovations**, Date: 9th December 2022. Over 150 participants attended this prestigious conference, which featured 20 paper presentations and keynote speeches by leading industry experts. The event served as a platform to showcase cutting-edge research and foster collaboration among academia and industry stakeholders.
3. **Guest Lecture on Smart Cities and IoT Integration**, Date: 18th December 2022. Delivered by Mr. Ramesh Kumar, a renowned IoT consultant, this lecture focused on the integration of smart technologies in urban planning. More than 100 students gained insights into using IoT to optimize urban infrastructure and enhance sustainability.

## Programs Attended

- 1. Faculty Development Program on Advanced Geotechnical Techniques:**  
Date: 21st November 2022. Four faculty members attended this FDP at IIT Madras, which highlighted innovative approaches in soil mechanics and foundation design. The program also introduced modern simulation tools for geotechnical analysis.
- 2. International Seminar on Green Infrastructure, Date: 5th December 2022.** Two faculty members participated in this seminar, which emphasized sustainable construction practices and the use of eco-friendly materials. The event facilitated networking with international researchers and industry leaders.

## Student Achievements:

- 1. Winning Team at National Concrete Design Challenge,** A team of five final-year students secured the first position in this prestigious competition. Their innovative design for high-strength, eco-friendly concrete impressed the judges, earning them national recognition and a cash prize of ₹50,000.
- 2. Internship Success,** Ten students completed internships at reputed firms such as L&T and Tata Projects, gaining hands-on experience in large-scale infrastructure projects.

## Faculty Contributions:

- 1. Resource Person Engagements:** Dr. Vennila delivered a session on "Sustainability in Civil Engineering" at a workshop hosted by PSG College of Technology. Her talk focused on practical strategies for implementing green construction practices.
- 2. Research Presentation:** Dr. Manju presented a paper titled "AI-Driven Optimization for Construction Processes" at an international conference,

receiving accolades for her pioneering work in leveraging artificial intelligence for project management.

## **Publications and Research Highlights:**

### **1. Innovative Use of Nano-Particles in Concrete Durability**

- *Authors:* Dr. Ramadevi, Dr. Gayathri
- *Journal:* *International Journal of Structural Engineering*
- *Impact Factor:* 3.8

### **2. Evaluating the Environmental Impact of Urban Construction**

- *Authors:* Dr. Geethakarathi
- *Conference Proceedings:* *Sustainable Urban Design Conference 2022*

## **Industry Collaborations and Consultancy:**

1. The department conducted a detailed topographical survey for an upcoming industrial park in Coimbatore. This project, completed in two months, contributed ₹2.2 Lakhs in consultancy revenue.
2. Material testing and mix design services were provided for a railway bridge project. The consultancy project emphasized cost-efficient solutions and generated ₹1.8 Lakhs in revenue.

## **Did You Know?**

- The Akashi Kaikyo Bridge in Japan, the world's longest suspension bridge, spans 3,911 meters and can withstand earthquakes of up to magnitude 8.5.
- Civil engineers play a pivotal role in ensuring the safety and sustainability of over 70% of global infrastructure projects.

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