

# **BUILDERS EXPRESS**

May – June 2024



KUMARAGURU COLLEGE OF TECHNOLOGY, Department of Civil Engineering, Newsletter May and June 2024



# **ABOUT KCT:**



Kumaraguru College of Technology is an autonomous, selffinancing 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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#### Message from the Head of the Department:

"The Department of Civil Engineering achieved new milestones in May and June 2024, focusing on faculty development, impactful research, and strengthening industry-academia relationships. These initiatives have set the foundation for sustained excellence in teaching and research."

— Dr. Selvan V

#### **Programs Organized:**

#### Workshop on Sustainable Engineering Concepts

- Faculty In-Charge: Dr. K. Ramadevi
- Date: May 15 to May 19, 2024
- Summary: This workshop introduced participants to sustainability principles and life cycle analysis in engineering practices.
- Outcomes: Enhanced participant knowledge on integrating sustainable practices into construction projects.

#### Seminar on Advances in Geotechnical Engineering

- Faculty In-Charge: Dr. V. Gayathri
- Date: June 10, 2024
- Summary: A one-day seminar featuring guest speakers from industry and academia on innovative geotechnical solutions.
- Outcomes: Fostered networking opportunities and knowledge sharing between faculty, students, and industry experts.

#### **Programs Attended**

- 1. International FDP on Vertical Urbanization
  - Faculty: Ms. U. Sindhu Vaardini and Dr. B. Nithyalakshmi
  - Date: May 21 to June 4, 2024





- Summary: Hosted by SRM Institute of Science and Technology, this program covered challenges in tall building construction and urbanization.
- Outcomes: Faculty gained advanced knowledge of vertical urbanization techniques, enabling them to guide students on modern construction trends.

#### 2. FDP on Planswift Software

- Faculty: Ms. U. Sindhu Vaardini
- Date: June 15 to June 19, 2024
- Summary: Focused on using Planswift software for quantity takeoff and estimation.
- Outcomes: Faculty expertise in digital estimation tools improved, benefiting curriculum updates and student training.

#### **Faculty Contributions:**

#### **1. Research Projects**

- Faculty: Dr. A. Geethakarthi
- Summary: Led a funded research project on utilizing nanotechnology to entrap and utilize ammonia gas from poultry farms.
- Outcomes: Published findings in reputed journals, showcasing the department's contribution to practical engineering solutions.

#### 2. Mentorship

- Faculty: Dr. R. Manju
- Summary: Guided students on research projects related to microbial concrete and flexural behavior of reinforced beams.
- Outcomes: Students presented their research at national conferences and published articles in peer-reviewed journals.





#### **Student Achievements:**

#### 1. Innovative Projects

- Faculty Mentor: Dr. G. L. Sathyamoorthy
- Summary: Students developed an optimized concrete mix design using eco-friendly materials during their summer internships.
- Outcomes: Projects were shortlisted for presentation at the national conference on sustainability.

#### 2. Competitions

- Summary: Students secured first place in a regional competition on sustainable construction practices held in May 2024.
- Outcomes: Students demonstrated practical application of sustainable engineering concepts.

#### **Publications and Research Highlights:**

#### **1. Significant Publications**

- Faculty: Dr. Ramadevi and Dr. Gayathri
- Summary: Published research on the impact of nano additives in concrete and life cycle analysis of construction materials in SCI-indexed journals.
- Outcomes: Elevated the department's research profile and inspired further collaborations with global researchers.

#### 2. Collaborative Studies

• Faculty: Dr. Nithyalakshmi





- Summary: Co-authored a review paper on microfiber pollution and its ecological impacts.
- Outcomes: Strengthened interdisciplinary research and visibility in environmental engineering.

#### **Industry Collaborations and Consultancy:**

#### **1.** Consultancy on Soil Investigation

- Faculty: Dr. V. Gayathri
- Date: May 2024
- Summary: Conducted soil investigation for a commercial building in Coimbatore.
- Outcomes: Provided valuable insights to the client while enhancing practical exposure for students involved.

#### 2. Project on Smart Materials

- Faculty: Dr. K. Ramadevi
- Date: June 2024
- Summary: Collaborated with a private construction firm to test and analyze smart materials for urban housing.
- Outcomes: Contributed to the development of innovative construction materials.

#### **Did You Know?**

- The department recently collaborated on a project to assess **biodegradability tests using ASTM methods**, which has applications in both academic and industrial sectors.
- Faculty introduced **digital estimation tools like Planswift** into the curriculum, providing students with cutting-edge skills for the job market.





#### **Upcoming Events:**

#### **1.** National Symposium on Construction Automation

- Date: July 2024
- Summary: Focus on the latest trends and innovations in construction automation.
- Expected Outcomes: Enhance participant knowledge and foster industryacademia partnerships.

#### 2. Workshop on Sustainable Design Practices

- Date: August 2024
- Summary: Practical workshop on integrating sustainability into design and construction processes.
- Expected Outcomes: Equip participants with actionable strategies for sustainable engineering.



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