



KUMARAGURU
COLLEGE OF TECHNOLOGY
Character is Life

**CIVIL
ENGINEERING
ASSOCIATION**



BUILDERS EXPRESS

September – October 2024



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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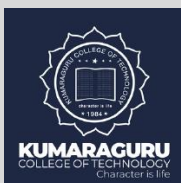
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Message from the Head of the Department:

"The Department of Civil Engineering continues its pursuit of excellence in academics, research, and industry collaboration. Over the last two months, we have conducted impactful programs, strengthened our industry partnerships, and contributed significantly to research. With a strong focus on innovation and sustainability, we are preparing our students to lead in the ever-evolving field of civil engineering."

— Dr. Selvan V

Programs Organized:

National Conference on Smart Infrastructure and Sustainable Development

- **Date:** 10th September 2024
- **Participants:** 180+ students, faculty, and industry professionals
- **Keynote Speakers:**
 - *Dr. A.K. Ramachandran*, IIT Madras
 - *Mr. Venkatesh Sharma*, Larsen & Toubro

Highlights:

- Presentations on green construction techniques, digital twins in civil engineering, and AI-driven project management.
- 20 technical papers were presented, showcasing innovative research from students and faculty.

Workshop on AI & Machine Learning in Civil Engineering

- **Date:** 22nd September 2024
- **Attendees:** 75 students and faculty members
- **Topics Covered:**
 - AI-driven structural analysis

- Automated construction monitoring using ML algorithms
- Smart building technology integration
- **Outcome:** Participants gained hands-on experience with AI-based modeling tools and real-time data analytics.

Site Visit to Chennai Metro Rail Project

- **Date:** 5th October 2024
- **Participants:** 40 UG students
- **Objective:** Understanding the execution of large-scale urban infrastructure projects, focusing on tunneling and metro construction techniques.

Programs Attended

1. International Conference on Smart Cities

- **Date:** 15th September 2024
- **Venue:** IIT Delhi
- **Faculty Representatives:** 5 members from the department
- **Key Discussions:**
 - Integration of IoT in urban infrastructure
 - Role of AI in traffic management
 - Smart energy systems for sustainable cities

2. National Workshop on 3D Printing in Construction

- **Date:** 1st October 2024
- **Hosted by:** CSIR-Structural Engineering Research Centre (SERC)
- **Participants:** 10 students and 3 faculty members

- Outcome: Gained exposure to the latest advancements in 3D printing for precast construction.

Faculty Contributions:

1. Keynote Speaker at International Conference on Green Infrastructure

- Speaker: Dr. Ramadevi K
- Topic: "Role of AI in Green Building Management"
- Venue: IIT Madras

2. Research Paper Presentation at Structural Engineering Congress

- Presenter: Dr. G.L. Sathyamoorthy
- Paper Title: "Resilience in High-Rise Structures against Seismic Activities"
- Impact: Discussed innovative seismic mitigation techniques

Student Achievements:

1. Best Paper Award at National Civil Engineering Symposium

- Students: R. Prakash and A. Vishnu (Final Year)
- Paper Title: "Optimization of Concrete Mix using AI-based Models"
- Award: ₹20,000 cash prize and a certificate of excellence

2. Internship Excellence – Smart City Initiative

- **Students:** 8 final-year students completed a prestigious internship at **Smart City Coimbatore.**
- **Project Focus:** Sustainable drainage systems and energy-efficient urban planning.



Industry Collaborations and Consultancy:

1. Soil Investigation for Industrial Township Development

- **Project Value:** ₹3.2 Lakhs
- **Client:** Tamil Nadu Industrial Development Corporation (TIDCO).

2. Structural Testing and Certification for Southern Railways

- **Revenue Generated:** ₹1.5 Lakhs
- **Scope:** Concrete mix design and strength testing for bridge structures.

3. Consultancy for Green Building Certification

- **Client:** Private developers in Coimbatore
- **Revenue:** ₹2 Lakhs

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