

Computer Science & Engineering (CSE) & Information Technology (IT)

Faculty Specializations:

- ☐ Artificial Intelligence (AI) & Machine Learning (ML) : Prof. R. B. Lagdive/ Dr. A. A. Bhusari
- ☐ Cybersecurity & Blockchain : Prof. S. . S. Adagale
- ☐ Internet of Things (IoT) & Embedded Systems : Dr. P. R. Patil/ Dr. Khadait Khushbu
- ☐ Cloud Computing & Big Data Analytics Dr. Pawar Suravana

R&D Initiatives:

- ☐ Establish an AI & Data Science research lab.
- ☐ Organize hackathons, coding marathons, and research competitions.

2. Electronics & Communication Engineering (ECE)

Faculty Specializations:

- ☐ Wireless Communication & 5G Technology : Dr. D. D. Kulkarni, Dr. T. G. Thite & Dr. D. A. Jakkan
- ☐ Signal Processing & Image Recognition : Dr. T. GThite Optical & Quantum Communication : Prof. K. D. Patil
- ☐ Embedded Systems : Dr. D. D. Kulkarni & Prof. J. D. Palkar

R&D Initiatives:

- ☐ Develop IoT-based smart campus solutions.
- ☐ Establish a research lab for VLSI design and chip fabrication.

Mechanical Engineering (ME)

Faculty Specializations:

- ☐ Mechatronics/Manufacturing/Design: Dr. K. B. Gavali/Prof. V. D. Kolate
- ☐ Additive Manufacturing (3D Printing): Dr. M.K. Chaudhary
- ☐ Renewable Energy Systems: Dr. M. K. Chaudhary
- ☐ Composite Structures: Dr. A. H. Karle

R&D Initiatives:

- ☐ Develop autonomous robotic systems for industrial automation.
- ☐ Work on sustainability-driven mechanical innovations (solar, wind energy).
- ☐ Automotive companies for electric vehicle (EV) research.

Civil Engineering (CE)

Faculty Specializations:

- ☐ Smart & Sustainable Infrastructure:Prof. P. M. Mantakar/Dr. S. S. Deshmukh
- ☐ Structural Analysis : Prof. P. M. Mantakar
- ☐ Surveying: Prof. P. M. Mantakar
- ☐ Environment Engineering: Prof. A. C. Shirle
- ☐ Contracts & Tenders: Prof. K. H. Ghorpade

R&D Initiatives:

- ☐ collaboration with KJEI Infra projects.
- ☐ Develop low-cost housing solutions using eco-friendly materials.

The equipped facilities used for conducting experiments, testing, and developing projects/prototypes to support research and innovation in engineering.

Civil Engineering:

- ❑ A Ph.D. Research Centre in Civil Engineering provides advanced research facilities, expert guidance, and an academic environment for scholars pursuing doctoral research in various domains of civil engineering. The center promotes innovative research, industry collaboration, consultancy, patents, publications, and sustainable technological development.
- ❑ To promote a culture of research amongst the students and faculties E&TC and Mechanical Department has Robotics and Automation Center of Excellence Lab. which has industrial SCARA Robot.

UG (Undergraduate) level research in Mechanical Engineering with 3D Printing provides students with hands-on experience in design, prototyping, and innovative product development using additive manufacturing technology. It helps students transform creative ideas into functional models and industry-oriented solutions.



Activities Conducted Under this Lab

- ❑ Faculty Training Program on Robotics and Automation
- ❑ Values added Program for BE Students on SCARA Robot
- ❑ 2 Project Groups Worked on SCARA Robot for their Project
- ❑ Values added Program for E&TC Students on SCARA Robot



A **professional membership** an individual is a registered member of a recognized professional organization or body (such as IET, IEEE, ISTE, etc.)

Institutional/Department level professional membership

Civil Engineering:

- ❑ Indian Geotechnical Society:
03/04/2024, Student Chapter:
Experiment/ Testing and Technical
competition related to Soil/Geotech.

Computer Engineering:

- ❑ IAEng Membership for Computer
department. 34 students registered.

E&TC Engineering:

- ❑ The Institution of Electronics and
Telecommunication Engineers The
objectives of IETE focus on advancing
electro-technology. The IETE conducts
and sponsors technical meetings,
conferences, symposia, and exhibitions



Faculty members of the Civil Engineering Department of Trinity Academy of Engineering participated in a training program conducted by Survey of India to enhance technical knowledge and practical skills in surveying, mapping, and geospatial applications.