

Registration

Category (Academicians/Research scholars/ Students/Industry professionals)	National (INR inclusive of GST)		Foreign (USD inclusive of TAX)	
	ISHRAE, IEI Member	Non-ISHRAE, IEI Member	ASHRAE, IEI Member	Non-ASHRAE, IEI Member
Paper presentation & Pre- Conference workshop	8000	9000	95	106
Paper presentation only	7000	8000	82	95
Conference participation (without Paper presentation)	2000	2500	23	29
Pre-Conference participation	750	1000	09	12

Online Payment Guidelines: Procedure to complete the payment
(Search, View and Pay)

- Step 1:** Click the given payment link (ICICI Bank – <https://eazypay.icicibank.com> – eazypay)
- Step 2:** Type and Select T C E SOUVENIOR CCE in search bar
- Step 3:** Fill in all the required and mandatory details
(Note-Title of the program: DESINES25)
- Step 4:** Click Show details and please enter a six-digit OTP, to validate the registered mobile number or email
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Thiagarajar 68
College of Engineering YEARS
1957-2025
Celebrating Academic Excellence

where quality and ethics matter



**Department of Mechanical Engineering &
Department of Mechatronics**

Organize
**International Conference on
Digitally Empowered Sustainable
Industrial and Energy Systems**

DESINES'25

Hybrid mode

05 - 06 December 2025

Technical Co-Sponsors

Universities

Companies

Sussex
University, UK

Taylor's University,
Malaysia

University college
London, UK

University of
Houston, USA.

University of
Jaen, Spain.

IIT-Guwahati.

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A Bosch Company
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Bangalore

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Professional Society:

ISHRAE



About TCE

Thiagarajar College of Engineering (TCE) is Government Aided Autonomous Institution, established in 1957 by the philanthropist Late Karumuttu Thiagarajan Chettiar. TCE is affiliated to Anna University, Chennai, and approved by the All India Council for Technical Education (AICTE). TCE offers a wide array of Undergraduate, Postgraduate, and Ph.D. Programs across various disciplines of Engineering, architecture, and Science. The campus is set within a serene and eco-friendly environment surrounded by dense vegetation and the best infrastructure facilities.

TCE has consistently embraced reforms and upgrades in its Teaching-Learning processes. Noteworthy initiatives include the implementation of a Competency-Based Curriculum and Outcome-Based Education. Since 2018, TCE has adopted the Conceive Design Implement Operate (CDIO) framework, shaping curriculum design, pedagogical methods, and assessment techniques, with adequate hands-on training for students. The institution has also launched several Massive Open Online Courses (MOOCs) in 2021. The college also maintains active industry collaborations with leading global organizations. These collaborations have resulted in the establishment of state-of-the-art laboratories, industry-oriented curriculum design, collaborative projects, professional training programs, student internships, and placements.

TCE actively engages in sponsored research projects to drive innovation and develop practical technologies. The institution has been successful in securing substantial funding from various government and private sources to support its research initiatives. TCE has received grants from bodies such as AICTE, DST, DRDO, and UGC, enabling the development of advanced research facilities, student projects, and specialized training programs. The institution introduced the Thiagarajar Research Fellowship (TRF) scheme for Ph.D. research scholars, furthering its commitment to academic excellence and research innovation. The programmes offered at the institution have garnered numerous accolades, including accreditation by NAAC with a CGPA of 3.56 (out of 4.0) with an A++ Grade in Cycle 2.



About Department of Mechanical Engineering

The Department of Mechanical Engineering, established in 1957, offers an Undergraduate Program in Mechanical Engineering accredited by the NBA since 1997. The Department has undertaken research projects funded by DRDO, DST - SERB, DST - FIST, UGC, AICTE - RPS, AICTE - MODROBS, ISHRAE, and TEDA. The department is backed by highly qualified and professionally experienced faculty and has research facilities with sophisticated equipment to carry out research in the areas of Rapid Prototyping, Reverse Engineering, CAD, CAM, Robotics, Machine Vision, Nanotechnology, Refrigeration & Air Conditioning, Automotive Engineering, CFD, Composite Materials and Industrial Engineering. The department adopted Outcome-Based Education in the academic year 2014-15 and integrated the Conceive Design Implement Operate (CDIO) framework in 2018, enhancing curriculum design and teaching methods. In 2019, the department, in collaboration with TVS Motors Ltd., established the TCE-TVS Centre for Automotive Research. This industry-sponsored research centre is equipped with advanced machines, instruments, and test rigs, following Japanese Total Quality Management (TQM) principles.

About Department of Mechatronics

The Department of Mechatronics was established in the year of 1998. At present, the Department offers B.E. Mechatronics Program. The Department aims at producing talented Mechatronics engineering specialists who cater to the needs of the relevant industries. The faculty members are doing research projects from major funding agencies such as DST, UGC, CVRDE and AICTE. The Department has full-fledged laboratories to carry out undergraduate, postgraduate and doctoral program in various specializations of the Mechatronics engineering field. State-of-the-art facilities in various laboratories encourage students to carry out research in the areas of Sensors, Smart Materials and Structures, Internet of Things (IoT), Automation and Control, Robotics and Embedded System.

About the Conference

The International conference on Digitally Empowered Sustainable Industrial and Energy Systems (DESINES-2025) will be hosted by Departments of Mechanical Engineering and Mechatronics, Thiagarajar College of Engineering, Madurai, India. The conference aims to bring together scholars from all over the world to present their research advances in the relevant fields and to exchange information and ideas related to Digital Manufacturing, Design and Energy Systems. The conference will also provide a unique platform to form new collaborations and meet experts from the fields of fundamentals, applications, and products mentioned above. DESINES-2025 focuses on different aspects pertaining to their respective theme, namely: IoT enabled digital manufacturing, Supply chain, Battery Management, Green Materials, Sensors and Actuators, Energy conservation, Computational Fluid Dynamics, Renewable energy, AI in energy sustainability, Heating and Ventilation Cold chain, cold storage, and Refrigerated Transport.

Conference Tracks

Track 1: Power and Energy

- Energy Conservation
- Heating and Ventilation
- Refrigeration and Air Conditioning
- Optimizing energy usage
- Improving Water Conservation Purification
- Computational Fluid Dynamics
- Battery Management
- Renewable Energy

Track 3: Sustainable systems through IoT

- Sensors
- Actuators
- Sustainable IoT devices
- Industry IoT
- Intelligent Transportation Systems
- Fault Diagnosis
- Supply Chain & Logistics
- AI in energy sustainability

Track 2: Sustainable Materials

- Smart Materials
- Green Materials
- Materials Processing
- Functionality graded Materials
- Mechanical Metallurgy
- Biomaterials

Track 4: Digital manufacturing

- Manufacturing Process and Automation
- Intelligent Manufacturing Systems
- Mechatronics
- Robotics
- Biomimetic
- Automation and Control Systems
- Process Control
- Quality Control
- Modelling, Planning and Control

Call for papers

Submit the full paper electronically using the CMT portal mentioned on the website. The submitted research work must be original in content and free from plagiarism. Authors are required to provide a plagiarism report using iThenticate or Turnitin. The plagiarism level must be below 20% for the paper to qualify for review.

Please click the link below to find and download the Paper Template format: <https://tinyurl.com/huc59u8n>

Publications

All the accepted papers will be considered for publication in the Trans Tech Publications, Journal of the Institution of Engineers (India): Series A -E, Springer & CRC Press Book Chapter.

Important Dates:

Paper submission extended deadline: ~~August 15, 2025~~ **September 15, 2025**

Submission deadline after review: **September 30, 2025**

Acceptance notification: **October 15, 2025**

Registration deadline: **October 20, 2025**

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