



KINGS ENGINEERING COLLEGE

Chennai-Bangalore Highway, Irungattukottai, Sriperumbudur, Chennai-602117
Accredited by NAAC, Affiliated to Anna University & Approved by AICTE

INTERNATIONAL CONFERENCE ON INNOVATIONS AND CHALLENGES IN ENGINEERING AND TECHNOLOGY ICICET - 2026 (HYBRID MODE)

PROCEEDINGS

20 MARCH 2026

INSTITUTE VISION

The vision of Kings Engineering College is to provide industry relevant technical education, motivate our technocrats to carry out skillful research and encourage innovation and thereby uplift our society through technology.



CHAIR PERSON

**Dr. Nalini Selvaraj, M.Com., M.Phil., Ph.D.,
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- **Dr. Antony George Fernando A, Professor & Head -
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An Autonomous Institution

ACCREDITED WITH NAAC, APPROVED BY AICTE & AFFILIATED TO ANNA UNIVERSITY

Welcome to International Conference ICICET-2026

DATE
20th MARCH 2026



VENUE
KALVITHANDHAI AUDITORIUM

Dr.Sujatha Rajkumar

Professor, Department of Embedded Technology
School of Electronics Engineering,
Vellore Institute of Technology, Vellore, India

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(ACADEMICS)
Mr. M.Pravin Mani,
B.E, MBA

CONVENOR

Dr. A.Senthil Kumar
M.E., Ph.D



ABOUT COLLEGE

Kings Engineering College was founded by Late Dr. Oorvasi D Selvaraj M.A., M.Phil., and Managed by the Chaitan Educational and Health Trust, a Registered Trust of public nature for Educational and Charitable purposes in 2001. The Vision of Kings Engineering College is to provide industry-relevant technical education, motivate our technocrats to carry out skillful research, and encourage innovation and thereby uplift our society through technology. The college is an Autonomous Institution approved by AICTE, New Delhi, Affiliated to Anna University Chennai and Accredited by NAAC.

The college offers eight undergraduate programs and one postgraduate program. Undergraduate programs include Artificial Intelligence and Data Sciences, Artificial Intelligence and Machine Learning, Computer Science and Engineering, Information Technology, Electronics and Communication Engineering, Bio Medical Engineering, Mechanical Engineering and Robotics and Automation. M.E. Computer Science Engineering is a post-graduate program.

The college upholds a high standard of education by offering a wide range of exceptional academic facilities, employing exceptionally qualified and experienced faculty members, and creating an environment favorable to great education. The management encourages all students to discover an intellectual role providing outstanding education, discipline and a high placement record.

ABOUT THE CONFERENCE

The ICICET-26 is multidisciplinary International Conference, serves as an outstanding platform for researchers to share their findings and thoughts with fellow researchers across the World. This International Conference aims to bring together leading academicians, industrialists, research scholars, scientists and students from various places in the World to exchange and share their experience and research results in computational model and recent trends in Engineering. The International Conference will also help professionals to manage all aspects of learning and creating opportunities for the next generation workforce to develop their professional skills. The conference ICICET -26 reflects the current focus of global research, recent developments, challenges and emerging trends in the field of Computer, Communication, Electronics, Mechanical, Information Technology, Bio-Medical, Artificial Intelligence and Robotics.

All the Accepted papers will be published in conference proceedings with ISBN.

Quality papers are forwarded to scopus and web of Science journals with authors additional charges.

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Dr. V. Ravichandran, Professor, SEC, Chennai.
Dr. G. Suresh, Professor, PEC, Chennai.

REGISTRATION FEE:

UG/PG Scholars : Rs. 800/-
Research Scholars / Academicians : Rs. 1000/-

CONTACT US:

icicet2026@kingsedu.ac.in
www.kingsedu.ac.in

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Mrs. Marilyn Jemmimah Amirtharaj, B.E., MBA.

DEAN ACADEMICS

Mr. Pravin Mani, B.E., MBA.

DEAN ADMIN

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INTERNATIONAL CONFERENCE - ICICET'2026



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20TH MAR 2026

ECE & BME

Antenna and Wave Propagation
RF & Microwave Systems
Communication Systems for 5G and 6G Technology
Wireless Communication
Optical Communication
VLSI and Chip Design
AI and ML based Embedded Systems for IoT Networks
Embedded for Automotive and Electric Vehicles
Bio Medical and Instrumentation
Image Processing
Analytical Chemistry
Organic and Inorganic Chemistry
Nanomaterials
Magnetic Materials

MECH & R&A

Finite Element Methods
Experimental Mechanics
Modelling and Simulation
Optimization Techniques
Collaborative Design
Design of Experiments
Design for Manufacturing
Rapid Prototyping / 3D Printing
Product Design and Reliability
Rotor Dynamics
Multi-body Dynamics
Nonlinear Mechanics
Power Plant Engineering
Industrial Automation and Robotics
Industrial Biotechnology
Industrial Design and Safety Management

CSE, IT, AI & (DS,ML)

Artificial Intelligence
Algorithms and Data Structures
Automata Theory
Big Data
Blockchain
Cloud Computing
Computational Complexity,
Economics, Geometry
Computational Physics & Biology
Computational Science and Applications
Cryptography
Data Mining
Deep Learning
Information Theory
Big Data Analytics, Algorithms, Search

S&H

Nanomaterials
Magnetic Materials
Luminescence
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Mathematics and Computer Science
Dynamical Systems
Solid State Chemistry
Supramolecular Chemistry
Computational Chemistry
Advanced Engineering Mathematics
Applied Mathematics
Numerical Methods
Probability and Statistics
Linear Algebra and Matrix Theory
Differential Equations (ODE & PDE)
Complex Analysis
Optimization Techniques
Graph Theory

ICICET '26



20th
MAR



KEC,
SRIPERUMBUDUR,
CHENNAI - 602117



FROM 8AM
TO 5PM

Paper Submission Deadline - 10th Mar
Intimation of Paper Acceptance - 13th Mar
Submission of Camera-Ready Paper - 15th Mar
Last Date of Registration - 18th Mar



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INVITATION

The Management, Faculty Members and Students

Cordially invite you all

International Conference on Innovation and Challenges in Engineering and Technology (ICICET-2026)

On 20th March 2026,

Time: 10 AM

Venue: Kalvi Thandhai Auditorium

Chief Guest

Dr. Sujatha Rajkumar, M.E., Ph.D.,

Professor - Department of Embedded Technology,

School of Electronics Engineering,

Vellore Institute of Technology, Vellore.

Chairperson

Dr.J.Nalini Selvaraj M.Com, M.Phil,Ph.D

Dean Academics

Mr. Pravin Mani BE,. MBA

DirectorConference Chair

Mr. S. Amritharaj, B.Tech,. MBA(UK)

Principal

Mrs. Merilyn Jemimmah Amritharaj BE, MBA

Dr. D. C. Jullie Josephine, Ph.D



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International Conference on Innovation and Challenges in Engineering and Technology ICICET -2026

AGENDA

DURATION	EVENT	BESTOWER
<i>Inauguration</i>		
10.00 AM	Prayer Song	College Choir
10.05 AM	Prayer	Dr. Venmathi A R
10.10 AM	Bible Reading	HOD - ECE
10.15 AM	Tamil Thai Vazhthu	Audio Player
10.20 AM	Welcome Address	Dr. J.Alphas Jeba Singh HOD - IT
10.25 AM	Felicitation	Dignitaries
10.30 AM	Proceeding Release	Dignitaries
10.35 AM	Special Address	Dr. D.C.Jullie Josephine Principal
10.40 AM	Guest Introduction	Dr. S. Lekashri HOD - BME
10.45 AM	Guest Address	Dr. Sujatha Rajkumar Professor VIT University, Vellore.
11.15 AM	Vote of Thanks	Dr. A. Senthil Kumar, Convener – ICICET - 2026 Professor - ECE& Head of R&D
11.30 AM	Online & Offline Sessions	Start PPT Presentations



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Kings Engineering College Organized

One Day

(Hybrid Mode)

International Conference on

“Innovation and Challenges in Engineering and Technology”

(ICICET - 2026)

On

20th MARCH 2026

ISBN: 978-81-999328-2-1

Mail ID: icicet2026@kingsedu.ac.in

Convener:

Dr. A. Senthil Kumar, M.E., Ph.D.,

Professor - ECE

Head – R&D Centre.

MESSAGE FROM THE CHAIR PERSON



Dr. Nalini Selvaraj, M.Com., M.Phil., Ph.D.,

CHAIRPERSON

It is quite gratifying to note that our college is hosting a Hybrid mode International Conference on “Innovations and Challenges in Engineering and Technology” ICICET 2026, on 20th MARCH 2026. This International conference is being organized keeping in mind the latest innovations and developments and I am sure it would provide the participants with minute details much relevant for present day survival. We are also bringing out a “Book of Abstracts” to highlight the recent research outcomes in the related field. I appreciate the organizing committee for showing a keen interest in organizing a successful Conference and contributing new ideas and research findings. We welcome you all for the hybrid Conference with a hope that you contribute for the effective organizing of the international conference.

MESSAGE FROM THE DIRECTOR



Mr. S.Amirtharaj, B.Tech.,MBA(UK).,

DIRECTOR

With immense pleasure we welcome you all to the hybrid mode International Conference on “Innovation and Challenges in Engineering and Technology” Organizing such an event at this point of time reinforces our objective of developing an environment for the exchange of ideas towards technological developments. I wish the conference would be able to deliberate on current issues of national and international relevance, particularly in the field of cloud computing, data mining, networks, image processing, big data analytics, embedded, IoT, Artificial Intelligence, Machine Learning etc. There have been unprecedented numbers of quality papers that are to be presented in the conference. I am sure that this occasion will provide an affable environment for the researchers and academicians to freely exchange the views and ideas with others. I convey my warm greetings and felicitations to the organizing committee and the participants and extend my best wishes for the success of the conference.

MESSAGE FROM THE PRINCIPAL



Dr. D. C. Jullie Josephine, M.Tech., Ph.D.,

PRINCIPAL

On behalf of KEC, I extend a very warm welcome to all the delegates and participants present today for the International Hybrid mode Conference 2026 on “Innovation and Challenges in Engineering and Technology”.

KEC has borne the mantle of excellence, committed to ensure the students their own space to learn, grow and broaden their horizon of knowledge by indulging into diverse spheres of learning. We are organizing this one-day hybrid International Conference on “Innovation and Challenges in Engineering and Technology.”

The Conference aims to bring different ideologies under one roof and provide opportunities to exchange ideas, to establish research relations and to find global partners for future collaboration. The themes and sub-themes for this conference are indicative of relevant research areas to give the prospective authors innovative prepositions about the ambit of discussion.

We wish to welcome our chief guest and thank our eminent keynote speaker and session juries for their valuable speech and their suggestions given on this great occasions.

Last but not the least; we would also like to thank the entire faculty, the organizers, and the students for their contribution in successfully organizing and managing this event. This event would not have been possible without their guidance and constant support.

We welcome you all to KEC and hope that this conference will act as a medium for all of us present here to ponder upon the topic of discussion, challenge us to strive towards it and inspire us at the same time. Thank you!

MESSAGE FROM THE DEAN



Mr. Pravin Mani, B.E., MBA.

DEAN (ACADEMICS)

Kings Engineering College has successfully completed two decades of dedicated service in educating rural and economically disadvantaged students in the field of Engineering. With the globalization of the Indian economy, there is a growing need for world-class quality in products and services to compete with global competitors in both manufacturing and service sectors.

This presents numerous challenges and opportunities for engineers in India and abroad. In this changing landscape, Engineering Institutions must transform from being mere teaching institutions to becoming centers of knowledge creation, innovation, and technology implementation. They must focus on transferring technology to practical applications, particularly for rural development, to address regional imbalances and provide urban amenities in rural areas.

In addition to the prescribed syllabus, it is imperative for students to demonstrate a willingness to learn, develop problem-solving skills, and possess effective interpersonal communication and relationship-building abilities, and exhibit motivation for work and cultural sensitivity.

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51	ECE52	VANET-BASED RIDER SAFETY SYSTEM Harish M, Ranjith S, Vishva T, Ms. Sivajothikavitha	32
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ABSTRACT

This project offers a Wi-Fi-enabled smart farming system utilizing an ESP32 microprocessor to monitor environmental data and regulate irrigation systems. The system employs multiple sensors, including the DHT11 for temperature and humidity measurement, the LDR for solar intensity assessment, the soil moisture sensor for soil moisture evaluation, and the rain sensor for precipitation detection. The system employs a relay module to irrigate the fields with water based on this information. The data collected from the sensors is subsequently communicated wirelessly using the HTTP protocol via Wi-Fi technology to a MySQL database utilizing a PHP backend. This information is subsequently presented on a web page, allowing the farmer to remotely oversee the farm's parameters.

PORTABLE RETINAL DIAGNOSTIC SYSTEM USING GENAI & DEEP LEARNING FOR DECENTRALIZED EYE CARE

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ABSTRACT

Our Smart AI Ophthalmologist will address India preventable blindness crisis by turning standard smartphones into specialized diagnostic tools. We will develop a fifteen thousand rupee hardware kit featuring a custom fundus lens cradle for use by ASHA and VHN staff in the field. This system will utilize an offline Deep Learning pipeline optimized for edge devices to categorize disease stages instantly at the point of care. In our upcoming pilot across Chennai's Urban PHCs, we expect to boost screening coverage from eight percent to a ninety two percent rate. By skipping expensive desktop cameras, we will reduce the per patient cost to just one hundred rupees. Finally, built in ABHA integration will ensure every screening is logged into the national health ecosystem, making large scale rural screening both technically and financially viable.

IOT BASED SMART AGRICULTURE SYSTEM FOR EFFICIENT CULTIVATION IN HILLY REGIONS

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ABSTRACT

Agriculture in hilly regions faces several challenges such as uneven terrain, irregular rainfall, water runoff, and landslides. Traditional irrigation systems rely on manual operation, which often leads to inefficient water usage and reduced crop productivity. This paper proposes an IoT-based smart agriculture system designed for efficient cultivation in hilly regions. The