



GOVT. MODEL ENGINEERING COLLEGE
THRIKKAKARA

Date : 3-5 April 2025

Venue: The Renai Cochin, Palarivattom, Kochi, Kerala

2ND INTERNATIONAL CONFERENCE ON TRENDS IN ENGINEERING SYSTEMS AND TECHNOLOGIES (ICTEST 2025)

ABOUT ICTEST-2025

The Second International Conference on Trends in Engineering Systems and Technologies 2025 (ICTEST-2025) aims to explore the latest advancements, innovations in engineering systems and technology. This conference provides an interdisciplinary platform for researchers, academicians and industry professionals to share their findings, discuss emerging challenges and collaborate on solutions across various engineering disciplines.

ICTEST-2025 will cover diverse and cutting-edge research areas including Artificial Intelligence, Machine Learning, Data Science, Cybersecurity, Network Technologies, Internet of Things (IoT), Blockchain Technologies, Smart Systems, Underwater GPS, Laser Communication, VLSI & Embedded Systems, Image and Signal Processing, Communication Systems, Biomedical Engineering, Healthcare Technologies, Power Electronics, Power Systems, Renewable Energy, Mechatronics, Robotics, Control and Automation, Electric & Hybrid Vehicles and Battery Technologies.

Bringing together leaders from academia and industry, the conference will serve as a platform for knowledge exchange, fostering collaboration among researchers and practitioners to drive innovation and technological progress. ICTEST-2025 invites leading researchers, engineers and scientists from across the globe to submit research papers and engage in discussions that shape the future of engineering and technology.

ABOUT THE INSTITUTION

Government Model Engineering College (MEC), established under the Institute of Human Resources Development (IHRD) by the Government of Kerala, stands as a beacon of excellence in engineering education. Affiliated with APJ Abdul Kalam Technological University (KTU), the college has been shaping innovators for over three decades. Known for its academic rigor, research contributions and industry collaborations, MEC has consistently been at the forefront of technological education in India.

With a strong emphasis on research and development, MEC has been instrumental in fostering innovation across multiple domains including Electronics and Communication, Computer Science, Biomedical Engineering, Electrical Engineering, Computer Science with Business Studies, Mechanical Engineering and VLSI Design & Technology. The institution actively encourages students and faculty to engage in groundbreaking research leading to numerous publications, research projects and industry partnerships.

MEC's commitment to excellence extends beyond academics, with well-equipped laboratories, state-of-the-art research facilities and an ecosystem that nurtures entrepreneurship and technological innovation. Through collaborations with national and international organizations, the college facilitates cutting-edge projects, incubation programs and skill development initiatives ensuring that students and researchers remain at the forefront of technological advancements.

The college's legacy is built on a culture of academic brilliance, a strong research orientation and an unwavering commitment to address real-world engineering challenges. MEC continues to uphold its reputation as a leading institution that drives technological progress, industry-academic synergy and a future-ready workforce.

PROGRAMME SCHEDULE

Inauguration Ceremony

April 3, 2025 at 09:30 AM

Prayer

Welcome

Dr. Mini M G

Principal, Govt. Model Engineering College, Thrikkakara

Presidential Address

Dr. V A Arun Kumar

Director, Institute of Human Resources Development (IHRD), Govt. of Kerala

Inaugural Address

Dr. Duvvuri Seshagiri

Director, Naval Physical and Oceanographic Laboratory (NPOL), Kochi

Felicitations

Dr. B S Manoj

Chair, IEEE Kerala Section, Associate Dean, IIST

Dr. Manjula Devananda

Senior Manager AI Research Scientist, Fusemachines, USA

Vote of Thanks

Dr. Jagadeesh Kumar P

General Chair, ICTEST

National Anthem

Day 1 - April 3, 2025

11:00 AM : Keynote Address Dr. B S Manoj

Chair IEEE Kerala Section,
Associate Dean IIST

01:00 PM - 02:00 PM : Lunch Break

02:00 PM : Plenary Session Dr. Manjula Devananda

Senior Manager AI Research Scientist,
Fusemachines, USA

09:00 AM - 05:00 PM : Paper presentations on Parallel Tracks

Day 2 - April 4, 2025

09:00 AM : Plenary Session Dr. Arvind Ajoy

Associate Professor, IIT Palakkad

11:00 AM : Plenary Session Dr. Meena D

Scientist, Electronics and Radar Development Establishment, LRDE, DRDO, Bangalore

02:00 PM : Plenary Session Dr. Varun P Gopi

Associate Professor, NIT Trichi

03:00 PM : Plenary Session Jyothish Balakrishnan

Senior Engineering Manager - Emulation,
Google

09:00 AM - 05:00 PM : Paper presentations on Parallel Tracks

05:00 PM to 08:00 PM : Gala Night 2025- Cultural programs

Venue : Internal auditorium, Model Engineering College

Day 3 - April 5, 2025

09:00 AM : Plenary Session Gopan V.P

General Manager, South Asia - NVIDIA

10:45 AM : Plenary Session Maya R Nair

Director - Chief Information Security Officer ,CRISIL Limited

12:00 PM : Panel Discussion Topic : How technology has helped in the advancement of products/ services.

09:00 AM - 05:00 PM : Paper presentations on Parallel Tracks

PLENARY SESSIONS AND SPEAKERS

03-04-2025 | 11:00 PM



Keynote Address
Topic : On Achieving 6G KPIs

Dr. B S Manoj
Chair, IEEE Kerala Section
Associate Dean IIST

03-04-2025 | 2:00 PM



Topic : Federated Learning in AI

Dr. Manjula Devananda
Senior Manager AI Research Scientist,
Fusemachines USA

04-04-2025 | 9:00 AM



Topic : Analog and Digital System Design of 'ScopeX' : An Aid for Electronics At Home

Dr. Arvind Ajoy
Associate Professor, IIT Palakkad

04-04-2025 | 11:00 AM



Topic : Photonic technologies for Radar applications

Dr. Meena D
Scientist, Electronics and Radar Development Establishment, LRDE, DRDO, Bangalore

04-04-2025 | 2:00 PM



Topic : Efficient AI and Autonomy: integrating hardware Acceleration with Algorithm Design

Dr. Varun P Gopi
Associate Professor, NIT Trichy

04-04-2025 | 3:00 PM



Topic : The Role of Emulation - Accelerating VLSI Design Validation

Jyothish Balakrishnan
Senior Engineering Manager – Emulation at Google

05-04-2025 | 9:00 AM



Topic : AI in Action : An industry perspective of real world use cases and benefits.

Gopan V.P
General Manager, South Asia - NVIDIA

05-04-2025 | 2:00 PM



Topic : Evolution of Cyber Security

Maya R Nair
Director – Chief Information Security Officer , CRISIL Limited

CONFERENCE TRACKS

Track 1 : Artificial Intelligence

Track 2 : Machine Learning and Data Science

Track 3 : Cybersecurity and Network Technologies

Track 4 : Internet of Things(IoT)

Track 5 : Blockchain

Track 6 : Technologies and Smart Systems

**Track 7 : Underwater GPS and Laser
Communication**

Track 8 : VLSI and Embedded Systems

**Track 9 : Image Processing, Signal Processing and
Communication Systems**

**Track 10 : Biomedical Engineering and Healthcare
Technologies**

Track 11 : Power Electronics

**Track 12 : Power Systems and Renewable Energy
Mechatronics**

Track 13 : Robotics

Track 14 : Control and Automation

**Track 15 : Electric & Hybrid Vehicles and Battery
Technologies**

Track 16 : Energy Conservation and Management

Track 17 : Reliability Engineering

Track 18 : Material Science

ADVISORY COMMITTEE MEMBERS

Dr. Anjan Chakravorty Professor, Electrical Engineering, IIT Madras

Dr Deleep R Nair Professor, Electrical Engineering, IIT Madras

Dr Raghavendra Sai V V Department of Applied Mechanics & Biomedical Engineering, (Aerospace building), IIT Madras

Dr. Arvind Ajoy Associate Professor, IIT Palakkad

Dr. Achuth Sankar S Nair Former Professor and Head of Dept. of Bioinformatics, University of Kerala

Prof. Jyothi John Former Principal, Govt Model Engineering College

Dr John Puthenparambil George Senior Photonics Engineer, Nubis Communications, NJ, USA

Dr Cejo K Lonappan Principal Systems Engineer at SiLC Technologies, Los Angeles, USA

Dr. Deepak P Associate Professor (CS), Queens University, Belfast, UK

ORGANISING COMMITTEE MEMBERS

Chief Patron : Dr. V A Arun Kumar Director, Institute of Human Resources Development(IHRD)

Patron : Dr. Mini M G Principal, Govt. Model Engineering College, Thrikkakara

In-house Advisor : Dr. Rajesh V G Dean, Govt. Model Engineering College, Thrikkakara

General Chair : Dr. Jagadeesh Kumar P Asst. Professor, Department of Electronics Engineering, Govt. Model Engineering College, Thrikkakara

Co-General Chair : Dr. Jobymol Jacob Professor, Department of Electronics Engineering, Govt. Model Engineering College, Thrikkakara

Co-General Chair : Sri. Jaimon Jacob Nodal Officer, Centre of Excellence (AI, ML, Robotics, Automation), Kerala Technological University

TPC Chair : Dr. Jessy John Professor, Department of Biomedical Engineering, Govt. Model Engineering College

Co-TPC Chair : Dr. K Vasudevan Professor Emeritus, Dept. of Electronics, Centre for Research in Electromagnetics & Antennas (CREMA), Cochin University of Science and Technology (CUSAT)

Publication Chair : Dr. Manju K Assistant Professor in Computer Engineering, Govt. Model Engineering College

Co-Publication Chair : Dr. Varun P Gopi Associate Professor, Dept. of ECE, NIT Tiruchirappalli, Tamil Nadu

Co-Publication Chair : Dr. Sony P Assistant Professor in Computer Engineering, Govt. Model Engineering College

Publicity Chair : Dr. Shaija P J Assistant Professor in Electrical and Electronics Engineering, Govt. Model Engineering College

Finance Committee Chair : Dr. Sindhu S Associate Professor in Applied Science, Govt. Model Engineering College

TIMELINE

CONFERENCE DATES

: APRIL 3, 4 AND 5, 2025

CONFERENCE LOCATION

: THE RENAI COCHIN,
PALARIVATTOM, KOCHI

CALL FOR PAPERS ANNOUNCEMENT

: SEPTEMBER 1, 2024

LAST DATE FOR DRAFT PAPER SUBMISSION

: JANUARY 15, 2025

NOTIFICATION OF ACCEPTANCE

: FEBRUARY 5, 2025

AUTHOR REGISTRATION

: FEB 10 - MAR 10, 2025

DEADLINE FOR SUBMITTING FINAL

: FEB 20 - MAR 10, 2025

CAMERA-READY PAPER

CONTACT US

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Publicity Chair : Dr. Shaija P J - shaija@mec.ac.in - 9447991108

Faculty, IEEE Member:INR 6500	Foreign Delegate, Professional, Non-IEEE Member:300 USD
Faculty, Non-IEEE Member:INR 8000	Foreign Delegate, Student IEEE Member:125 USD
Research Scholar/Student, IEEE Member:INR 6500	Foreign Delegate, Non-Student IEEE Member:150 USD
Research Scholar/Student, Non-IEEE Member:INR 8000	Additional Authors from India:INR 1000 (for one day)
Industry Professional, IEEE Member:INR 8000	Additional Authors from Outside India:20 USD (for one day)
Industry Professional, Non-IEEE Member:INR 10000	Attendees from India:INR 1000 (for one day)
Foreign Delegate, Professional, IEEE Member:255 USD	Attendees from Outside India:20 USD (for one day)

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