



Vidyayāmruthamashnute

# B. N. M. Institute of Technology

An Autonomous Institution under VTU.  
Banashankari 2<sup>nd</sup> Stage, Bengaluru 560 070. INDIA



## Conference Brochure

### 3<sup>rd</sup> IEEE International Conference

on

# Intelligent and Innovative Technologies in Computing, Electrical and Electronics

## 16-17 January 2025

### Organizing Departments:

- Electrical and Electronics Engineering
- Electronics and Communication Engineering



Bhageerathi Bai Narayana Rao Maanay  
Educational Institutions  
1972-2022



## About BNMIT

Since 2001, B.N.M. Institute of Technology has emerged as well-established in Karnataka, led by the philanthropic and visionary ideas of Founder and Managing Trustee Shri. N. Raghunath Rao Maanay and Founder Secretary Prof. Sunanda P Jadhav, and further expanded by Shri. Narayan Rao Maanay, Secretary, BNM Educational Institutions.

BNMIT is an Autonomous institution since 2021. This most sought-after institution located in the heart of Bangalore city set on a lush landscaped green campus. BNMIT offers UG programs in Computer Science, Electrical & Electronics, Electronics & Communication, Mechanical, Information Science and Artificial Intelligence & Machine Learning, apart from M Tech and MBA programs. The institute's state-of-the-art infrastructure includes Wi-Fi network, digital classrooms, highly sophisticated laboratories with latest equipment, Industry supported Centers of Excellence, Skill labs, fully furnished and equipped conference/seminar halls and a large auditorium.

BNMIT has adapted a unique outcome-based education system by employing project-based teaching-learning techniques with more emphasis on skill development. Centres of Excellence and specialized labs like Engineering Exploration Lab and Experiential Learning Lab help carry-out projects effectively. Implementation of LMS with Microsoft TEAMS ensures exceptional online education. QS-IGauge has certified BNMIT with E-Lead certification for excellence in E-Learning and Academic Digitization.

The Career and Professional development cell create global professionals through structured training programs, enabling 95% of eligible students to be placed across over 150 companies with attractive salary packages.

BNMIT is ranked by ARIIA in B band category of Private Self-financed institutions (26-50 band) and holds NIRF innovation rank in the band 150-300. Also, BNMIT is NAAC accredited with "A" grade and all eligible programs are NBA accredited. Most of the surveys conducted by agencies like TIMES, OUTLOOK, Dataquest and India Today have ranked BNMIT one amongst top Institutions in the country.

## About the Conference

In view of the grand success of the second IEEE International Conference on Intelligent and Innovative Technologies in Computing, Electrical and Electronics (ICIITCEE 2024) organized by BNM Institute of Technology, Bengaluru, India on 24<sup>th</sup> and 25<sup>th</sup> January 2024, the management and the organizers are coming with the third IEEE ICIITCEE 2025. The conference received overwhelming response across the world from researchers, academicians and industry. Totally 207 papers were accepted, presented, and published in IEEE Xplore. This year, 3<sup>rd</sup> ICIITCEE 2025 will be held on 16 and 17 January 2025. This conference will feature a comprehensive technical program including several special sessions and workshops. The goal of ICIITCEE 2025 is to provide an outstanding forum for academicians, researchers, practitioners, policymakers, and students to exchange ideas, techniques and tools, raise awareness, and share experiences related to all practical and theoretical aspects of intelligence and innovations in engineering.

ICIITCEE 2025 focuses on issues and solutions involving Intelligent and Innovative Technologies in Computing, Electrical and Electronics. Developments in the field of Computing, Electrical and Electronics are very complex and advance rapidly as changes occur on day-to-day basis. It is very difficult to make it available to all stakeholders (researchers, academicians, students, industrialists and society). Hence, the objectives of the conference are:

- To provide a platform for stakeholders to meet and share ideas, views and new findings in the field of contemporary Computing, Electrical and Electronics.
- To strengthen the relationship with industries and academic institutions of Karnataka and Bengaluru and, with the rest of the world.
- To provide a space for students and researchers to meet, discuss, and learn with experts in the related field.
- To bridge the gap between the industry and academics.
- To promote a high level of interaction among stakeholders in theoretical, experimental, and applied concepts in the field of Computing, Electrical and Electronics.

## Important dates:

**Submission Deadline: 30 September 2024**

**Acceptance Notification: 16 December 2024**

**Final Paper & Author Registration Closes: 26 December 2024**

**Conference: 16-17 January 2025**

## Chief Patron

**Sri. Narayan Rao R. Maanay,**  
Chairman, Governing Body,  
BNM Institute of Technology, Bengaluru, India.

## Chief Mentor

**Dr. S. Sadagopan,**  
Former Director, IIT Bangalore,  
Advisor, BNMIT

## Patrons

- **Dr. S. Vidyashankar,** Vice Chancellor, Belagavi, India.
- **Sri. Ashok R. Maanay,** Joint-Secretary, BNMEI, Bengaluru, India.
- **Prof. T. J. Rama Murthy,** Director, BNM Institute of Technology, Bengaluru, India.
- **Dr. S. Y. Kulkarni,** Additional Director & Principal, BNM Institute of Technology, Bengaluru, India.
- **Prof. Eishwar N. Maanay,** Dean, BNM Institute of Technology, Bengaluru, India.
- **Dr. Krishnamurthy G. N.,** Deputy Director, BNM Institute of Technology, Bengaluru, India.

## Advisory Board Members:

**Prof. Dr. T. Srinivas,** Chair-IEEE Bangalore Section, Professor, ECE, IISC, Bengaluru.  
**Dr. P. Deepa Shenoy,** Former Chair, IEEE Bangalore section. Professor, Department of Computer Science & Engineering, UVCE, Bengaluru.  
**Dr. Parameshachari B D,** Professor, Dept. of ECE, NMIT, Bengaluru SAC, Co-Chair, IEEE Bangalore Section.  
**Dr. Omid Ansari,** Penn State University, USA.  
**Dr. Sheldon Williamson,** Professor, Electrical, Computer and Software Engineering, Canada Research Chair in Electric Energy Storage Systems for Transportation Electrification, Senior Member – IEEE, Associate Editor for IEEE Transactions and Journals  
**Sri. Srikanth Korse,** R & D Engineer, Fraunhofer IIS, RWTH Aachen University, Germany.  
**Sri. Vikas Vijaya Kumar,** R & D Engineer, Tape-out Specialist, Stein bei Nürnberg, Bavaria, Germany.  
**Dr. Neelabh Kashyap,** Principal Data Scientist, KONE, Finland.  
**Sri. Ramesh Chinta,** Principal member-Technical Staff, AT&T, USA.  
**Sri. Samuel Jigme Harrison,** Senior Digital IC Design Engineer, ST Microelectronics Asia Pacific Pte Ltd, Singapore.  
**Dr. Shyam Vasudeva Rao,** Founder & Director, Renalyx Health Systems, Forum & Rx DHP, Bengaluru.  
**Sri. Balakrishna Islavath,** Deputy Director/Scientist, Centre for Electromagnetics, Chennai, R & D Laboratory, MeitY, Gol.  
**Sri. Bhanuprakash,** CoreEL Technologies, Bengaluru.  
**Sri. Subramanya,** SLN Technologies, Bengaluru.  
**Dr. Shivananda Koteswar,** Vice President & EDA Group Head South Asia, Synopsys, Bengaluru.  
**Dr. Manjunath N. K.,** Pro Vice-Chancellor & Director Research, SVYASA-Deemed to be University, Bengaluru.  
**Dr. Usha Manjunath,** Director, Institute of Health Management and Research (IHMR), Bengaluru.

## Steering Committee:

**Dr. S. Y. Kulkarni,** Additional Director & Principal, BNM Institute of Technology, Bengaluru, India.  
**Prof. Debabrata Das,** Ex Chair, IEEE Bangalore Section, Director, IIIT-Bangalore, Bengaluru, India.

## General Chair(s):

**Dr. Venkatesha K.,** Professor. & HoD, EEE, BNM Institute of Technology, Bengaluru, India.  
**Dr. Yasha Jyothi M. Shirur,** Professor. & HoD, ECE, BNM Institute of Technology, Bengaluru, India.

## Organizing Chair:

**Dr. Madhu S,** Associate Professor, EEE, BNM Institute of Technology, Bengaluru, India.  
**Dr. Jyoti R. Munavalli,** Professor, ECE, BNM Institute of Technology, Bengaluru, India.

## Technical Program Committee:

**Dr. Shubha Rao. K,** Chair, Associate Professor, EEE, BNM Institute of Technology, Bengaluru.  
**Dr. Ayan Datta,** Co-Chair, IEEE Chair, CAS, Bangalore Section.  
**Dr. Ganesh R Naik,** Co-Chair for CS Stream, Research Theme Co-Lead-Sleep Neuroscience and Novel Biomarkers, Flinders University, Adelaide, Australia.  
**Dr. Noor Zaman,** Co-Chair for CS Stream, Professor, CSE (Cybersecurity & AI), Program Director-PG Research Programmes Computer Science, Taylor's University, Malaysia.  
**Prof. T Nandha Kumar,** Co-Chair for EC Stream, Professor of Electronics, University of Nottingham, Malaysia.  
**Dr. Pramod Kumar,** Co-Chair for EC Stream, Professor, ECE, MIT, Manipal.  
**Dr. Sanjeevikumar Padmanaban,** Co-Chair for EE Stream, SMIEEE, Professor Dept. of EE, IT & Cybernetics, University of South-Eastern, Norway.  
**Dr. Anushree Ramanath,** Co-Chair for EE Stream, Technical Leader in Sustainability, Schneider Electric, San Francisco.  
**Prof. Raghavendra Prasad S.G.,** Vice Chair, IEEE Educational Society, Bangalore Chapter, RVCE  
**Dr. Kolla Bhanu Prakash,** Professor, Faculty of Computer Science Engineering, K L University, India  
**Dr. Sainarayanan Gopalakrishnan,** Technology Director, HCL Technologies, Chennai.  
**Dr. Bindu S.,** Professor, ECE, BNM Institute of Technology, Bengaluru.  
**Dr. Sudalai S Shunmugam,** Associate Professor, EEE, BNM Institute of Technology, Bengaluru.  
**Sri. Mohith Prabhu,** Senior Team Lead, Mathworks, Bengaluru.  
**Sri. Mukund Dixit,** Senior Project Engineer, Honeywell Technology Solutions, Bengaluru.  
**Dr. Priya R Sankpal,** Associate Professor, ECE, BNM Institute of Technology, Bengaluru.

**Dr. Keerti Kulkarni,** Associate Professor, ECE, BNM Institute of Technology, Bengaluru.

**Dr. Smitha Gayathri,** Associate Professor, ECE, BNM Institute of Technology, Bengaluru.

**Dr. Sujaya B L,** Associate Professor, ECE, BNM Institute of Technology, Bengaluru.

**Dr. Priyadarshini K Desai,** Associate Professor, ECE, BNM Institute of Technology, Bengaluru.

## Financial Chair(s):

**Dr. A. Kumar,** Associate Professor, EEE, BNM Institute of Technology, Bengaluru.

**Dr. Subodh Kumar Panda,** Professor, ECE, BNM Institute of Technology, Bengaluru.

**Dr. Manjunath G Asuti,** Associate Professor, ECE, BNM Institute of Technology, Bengaluru.

**Mr. Vyasraj T,** Assistant Professor, ECE, BNM Institute of Technology, Bengaluru.

## Publication Committee:

**Dr. Priyashree S,** Chair, Associate Professor, EEE, BNM Institute of Technology, Bengaluru, India.

**Dr. Abhishek Appaji,** Co-Chair, Treasurer, IEEE Bangalore Section, Professor, BMSC, Bengaluru.

**Dr. Rajkumar Rajashekhar,** Co-Chair, Professor, Vellore University, Vellore

**Dr. Rekha. P,** Co-Chair, Professor, ECE, BNM Institute of Technology, Bengaluru.

**Dr. Bhuvana Suganthi D,** Associate Professor, ECE, BNM Institute of Technology, Bengaluru.

**Dr. Ashwini S Savanth,** Associate Professor, ECE, BNM Institute of Technology, Bengaluru.

**Dr. Vrunda Kusanur,** Associate Professor, ECE, BNM Institute of Technology, Bengaluru.

**Dr. Rashmi S Bhaskar,** Associate Professor, ECE, BNM Institute of Technology, Bengaluru.

**Dr. Sunitha S V,** Associate Professor, ECE, BNM Institute of Technology, Bengaluru.

**Smt. Champa. P. N.,** Assistant Professor, EEE, BNM Institute of Technology, Bengaluru

## Information Chair(s):

**Dr. N. Sheshaprasad,** Professor-ECE, HoD, Dept. of Humanities, BNM Institute of Technology, Bengaluru.

**Mr. Sujith T,** Assistant Professor, EEE, BNM Institute of Technology, Bengaluru, India.

**Mr. Kiran K.N.,** Assistant Professor, ECE, BNM Institute of Technology, Bengaluru.

**Smt. Sarala T,** Assistant Professor, ECE, BNMIT, Bengaluru, India.

## Sponsorship Committee:

**Dr. Saritha Chakrasali,** Head, T & P, Professor, ISE, BNM Institute of Technology, Bengaluru.

**Prof. S. L. Satheesh Kumar,** Head, Teaching Learning Centre, BNM Institute of Technology.

**Dr. Vrunda Kusunur,** Associate Professor, ECE, BNM Institute of Technology, Bengaluru.

**Smt. Ashwini A,** Assistant Professor, EEE, BNM Institute of Technology, Bengaluru.

**Ms. Kruthi Jayaram,** Assistant Professor, EEE, BNM Institute of Technology, Bengaluru.

## Organizing Committee:

**Dr. Chayadevi M.L.,** Prof & HoD, CSE, BNMIT, Bengaluru, India.

**Dr. S. Sridivhya,** Prof & HoD, ISE, BNMIT, Bengaluru, India.

**Dr. B. S. Anil Kumar,** Prof & HoD, Mech. Engg, BNMIT, Bengaluru, India.

**Dr. Sheeba,** Prof. & HoD, AIML, BNMIT, Bengaluru, India.

**Dr. Vijayashree L.,** Head Innovations, BNMIT, Bengaluru, India.

**Smt. Karanam Vasudha,** Assistant Professor, EEE, BNMIT, Bengaluru, India.

**Smt. Raksha S,** Assistant Professor, EEE, BNMIT, Bengaluru, India.

**Smt. Shruti Joshi,** Assistant Professor, EEE, BNMIT, Bengaluru, India.

**Smt. Sumathi A.,** Associate Professor, ECE, BNMIT, Bengaluru, India.

**Smt. Lakshmi Bhaskar,** Assistant Professor, ECE, BNMIT, Bengaluru, India.

**Mr. Sudharshan,** Assistant Professor, ECE, BNMIT, Bengaluru, India.

**Smt. Rohini T,** Assistant Professor, ECE, BNMIT, Bengaluru, India.

**Mr. Sameera P,** Assistant Professor, ECE, BNMIT, Bengaluru, India.

## Call for Papers

3<sup>rd</sup> IEEE International Conference on Intelligent and Innovative Technologies in Computing, Electrical and Electronics (ICIITCEE 2025) will take place at , BNM Institute of Technology, Bengaluru, India, on 16 & 17 January 2025. All accepted and presented papers are eligible for submission to the IEEE Xplore Digital Library.

IEEE Conference Record: #64140

IEEE ISBN: 979-8-3315-1591-1

IEEE Part No: CFP25DA7-ART

The topics of the conference include, but are not limited to:

### Computer Engineering

- Intelligent Computing
- Database Management Systems
- Software Engineering
- Systems Software
- Data Communication and Networking
- Internet of Things
- Management Information System
- Artificial Intelligence
- Bio Inspired Computing
- Bioinformatics
- Computer Vision
- Expert Systems
- Image Processing
- Information Retrieval and Fusion
- Big Data
- Data Engineering
- Data Mining
- Data Warehousing
- Compiler Design
- Computer System and Modeling operating System
- Parallel and Distributed Computing

### Electrical and Electronics

- Advanced Control Strategies in Electric Vehicle
- Smart Grid & Distributed Generation
- Intelligent Power Electronic Systems
- Sustainable Energy & Reduction in Carbon Footprint – Associated Studies
- Advanced Material for PV Cells
- Power Quality Issues & Mitigation Techniques
- FACTS, HVDC & Custom Power Devices
- High Voltage & Power Engineering Applications
- Energy Management
- Hybrid EV, Plug-In Hybrid EV & Fuel Cell EV
- Vehicle to Grid, Vehicle to Building/ Critical Loads
- EMI & EMC Studies
- Distribution Automation, Advance Monitoring & Cyber Security
- Grid Reliability, Resilience – New Advances

### Electronics and Communication

- Signal Processing
- VLSI Design
- Antenna Engineering
- Photonic/Opto Electronic Structures / Devices
- Nanophotonics
- Consumer Electronics
- Smart Electronics Systems
- Low Power VLSI Circuits & Mixed mode VLSI
- Satellite Communication
- VLSI Verification and Testing
- Robotics and Automation
- Next Generation Networks
- Optical and Photonic Networks
- Spread Spectrum Communication
- Sensors & Networks
- Embedded Systems
- Communication Systems
- Quantum Computing
- VLSI & VHDL Design & applications
- Vehicular Communication Techniques
- MEMS & Medical Electronics

### Papers Submission:

Papers for presentations should conform to the IEEE format and specifications. All submissions must be in English only. Authors are invited to submit full paper (Maximum 6 pages, double-column US letter size) as PDF using the IEEE templates. Extra pages beyond this would require additional page length charges.

The IEEE paper template can be downloaded from the link given below.

<https://www.ieee.org/conferences/publishing/templates.html>

### Call for Special Sessions

3<sup>rd</sup> IEEE ICIITCEE 2025 will be hosting a series of special sessions. Special sessions feature topics related to the Computer, Electrical and Electronics Engineering on the latest research related to the area of interest of the proposer of the special session. Each organized session should have a minimum of 5 (FIVE) papers that will be subject to the regular review cycle by the session organizer. The session organizer will have full authority in soliciting and accepting papers for the session. The proposal should be submitted by September 30, 2024 to the General Chair by email ([iitcee.bnmit@gmail.com](mailto:iitcee.bnmit@gmail.com)) in the prescribed form available at the website:

<http://iciitcee.in/Specialsessions.html>

regular papers, invited presentations and panels that encourage the participation of attendees in active discussion.

For more details, visit [www.iciitcee.in](http://www.iciitcee.in)

### Registration fees:

| Category                         | From India | From Other Countries |
|----------------------------------|------------|----------------------|
| Author(s)                        | INR 8500   | USD 400              |
| Author(s) (IEEE Members)         | INR 6800   | USD 330              |
| Invited Presentation             | INR 6500   | USD 300              |
| Student Author(s)                | INR 5000   | USD 250              |
| Student Author(s) (IEEE Members) | INR 4000   | USD 210              |
| Conference Attendee / Listener   | INR 2500   | USD 150              |
| Additional Paper Fee             | INR 5000   | USD 350              |

### For Authors/Attendees:

All accepted papers should have at least one author registered. Additional paper requires additional registration. Only presented papers will be eligible for publication.

### Call for Tutorials/Workshop Proposals

In addition to exciting technical sessions, special sessions, industry panels and exhibitions, 3<sup>rd</sup> IEEE ICIITCEE 2025 will feature a series of half and full-day workshops/tutorials and invites the submission of proposals. The aim of the conference workshops/tutorials is to emphasize emerging topics not specifically covered in the main sessions. Workshops/Tutorials should highlight current topics related to technical and business issues relevant to the conference, and should include a mix of

### Contact:

Technical and Registration Enquiries:

General Chair ICIITCEE - 2025

E-mail: [iitcee.bnmit@gmail.com](mailto:iitcee.bnmit@gmail.com)