



ERODE SENGUNTHAR ENGINEERING COLLEGE



(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Board of Accreditation (NBA), New Delhi &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A Grade

PERUNDURAI - 638 057, TAMILNADU, INDIA

NEWS LETTER

2023 - 2024

Volume -2

DEPARTMENT OF

**M.TECH. COMPUTER SCIENCE AND
ENGINEERING (5 YEARS INTEGRATED)**

ABOUT US

M.Tech. in Computer Science and Engineering (CSE) program is designed to cultivate advanced technical expertise, innovative thinking, and ethical leadership. We provide a dynamic learning environment that equips students with cutting-edge knowledge and research capabilities, preparing them to address complex industry challenges and contribute to technological advancements. Our institution is committed to shaping the future of computer science and engineering by fostering innovation, excellence, and ethical leadership. We provide a dynamic learning environment that empowers students to become industry-ready professionals and responsible global citizens. We strive to be a leading center of excellence in Computer Science and Engineering, equipping students with the knowledge, skills, and ethical values necessary to meet industry and societal challenges. Through innovation and research, we aim to drive sustainable development and technological advancements.



DEPARTMENT

VISION



To emerge as a premier center of excellence in Computer Science and Engineering, fostering innovation, advanced research, and technological leadership to address global challenges and contribute to societal progress.

MISSION

- To impart quality education in Computer Science and Engineering with multidisciplinary approach, integration of theoretical knowledge, practical skills and emerging technologies.
- To cultivate a research-oriented approach, critical thinking and problem-solving abilities through innovation and industry collaborations.
- To inculcate ethical values, leadership qualities and commitment to the lifelong learning, empower the students for professional excellence.



PROGRAM OUTCOME (PO)

- Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

- Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM EDUCATIONAL OBJECTIVE (PEO)

- PEO1: Ability to be Successful career in academia or industries associated with Computer Science and Engineering.
- PEO2: Able to Exhibit analytical, decision making and problem solving skills for handling real life problems and to create novel products.
- PEO3: Ability to communicate the findings or express innovative ideas in an effective manner with an awareness of professional, social and ethical responsibilities to broader social context.
- PEO4: To Possess leadership qualities and emerge in a range of professions.

PROGRAM SPECIFIC OUTCOMES (PSO)

- **PSO1:** Apply the fundamental knowledge for problem solving and analysis as well as conduct investigations in computer science and engineering for sustainable development.
- **PSO2:** Design and develop the solutions for real time problems and implement them by using modern software tools in lieu of deploying them in the society for its growth.
- **PSO3:** Communicate effectively, adopt ethics and engage in life-long learning

SPECIAL EVENTS



Industrial Visit

2 days Industry Visit to Mysuru

Date: 01/08/2023 to 02/08/2023

Total: 36 students and 2 faculty

Company Name :

1. Date - 01/08/2023

Kayne Technology

2. Date- 02/08/2023

V2 soft technology

Mysuru, Karnataka, India
20, Metagalli, Mysuru, Karnataka 570016, In
Lat 12.365907°
Long 76.618278°
01/08/23 11:52 AM GMT +05:30



Mysuru, Karnataka, India
No. 177, Phase I, Hebbal Industrial Area, Mysuru, Karnataka 570018
Lat 11.309504°
Long 77.548784°
02/08/23 11:47 PM GMT +05:30



Mysuru, Karnataka, India
20, Metagalli, Mysuru, Karnataka 570016, India
Lat 12.366094°
Long 76.618157°
01/08/23 11:21 AM GMT +05:30



Mysuru, Karnataka, India
20, Metagalli, Mysuru, Karnataka 570016, India
Lat 12.366175°
Long 76.618105°
01/08/23 11:21 AM GMT +05:30

SPECIAL EVENTS



FACULTY INDUSTRIAL VISIT

2days Faculty Industry Visit

Date : 05/08/2023

Place : kudankulam Nuclear power plant



ASSOCIATION ACTIVITIES

DEPARTMENT OF M.TECH CSE – EVENTS & ACTIVITIES (2023–2024)

11.08.2023 – Inauguration of Students' Association

Chief Guest: Mr. Dhanabal Mariappan, Senior Site Reliability Engineer, Scalezee Solutions Pvt. Ltd., Bangalore

Topic: Cloud Native Tools – Microservices

16.08.2023 – 18.08.2023 – Workshop on Machine Learning

Resource Person: Mr. D. Ramakrishnan, CEO, ColIndSys Info Solutions, Coimbatore

25.08.2023 – Guest Lecture on Practical Approach towards Design Cloud Architecture

Resource Person: Mr. M. Suresh, Solution Architect, VMG Digital Pvt. Ltd., Chennai

11.09.2023 – 15.09.2023 – Workshop on Oracle – SQL & Oracle DBA

Coordinator: Mr. K.A. Dhamotharan, Associate Professor / M.Tech CSE, Oracle Academy Coordinator

22.09.2023 – 23.09.2023 – Workshop on Social Media Marketing

Resource Person: Mr. S. Mohanraj (Alumnus), Founder & CEO, Sunface Technologies, Coimbatore

27.09.2023 – Career Guidance Programme on Adapting to the Changing Landscape of Work: Navigating Career Transitions in a Dynamic World

Resource Person: Dr. R. Selvapraneetha, Career Guide & Founder, Coimbatore

27.10.2023 – Guest Lecture on Android Applications Development

Resource Person: Ms. S. Sangavi, Software Developer, ETS Infotech, Erode

13.11.2023 – 14.11.2023 – Workshop on Internet of Things (IoT)

Resource Person: Dr. R. Venkatesh, HR, PSG Software Technologies, Coimbatore

25.01.2024 – Leader's Talk on IoT with Cloud App Integration

Resource Person: Mr. P. Vishnu, AI Developer, Gateway Software Solution, Coimbatore

02.02.2024 – Guest Lecture on Business Analytics in Mobile Computing

Resource Person: Mr. Ramakrishnan K, Program Analyst, Cognizant Technology Solutions, Coimbatore

23.02.2024 – Leader's Talk on Recent Trends in Intelligent App Development

Resource Person: Mr. Sarath Krishnaswamy (Alumnus), Team Lead, Castle Labs, Coimbatore

13.03.2024 – Awareness Rally on World No Tobacco Day

15.03.2024 – Guest Lecture on Green Computing: E-Waste Management through Recycling

Resource Person: Ms. Sithara A, Process Associate, Bosch Global Software Technologies Pvt. Ltd., Coimbatore

28.03.2024 – Awareness Programme on Mobile Addiction

Venue: Government High School, Chennimalai

08.04.2024 – Awareness Programme on Mobile Addiction

Venue: Government High School, Salangapalayam

GUEST LECTURES & LEADER'S TALK

DEPARTMENT OF M.TECH CSE – GUEST LECTURES (2023–2024)

11.08.2023 – Guest Lecture on Cloud Native Tools – Microservices
Resource Person: Mr. Dhanabal Mariappan (Alumnus), Senior Site Reliability Engineer, Scalezee Solutions Pvt. Ltd., Bangalore

17.09.2023 – Guest Lecture on Practical Approach towards Design Cloud Architecture
Resource Person: Mr. M. Suresh, Solution Architect, VMG Digital Pvt. Ltd., Chennai

27.10.2023 – Guest Lecture on Android Applications Development
Resource Person: Ms. S. Sangavi, Software Developer, ETS Infotech, Erode

02.02.2024 – Guest Lecture on Business Analytics in Mobile Computing
Resource Person: Mr. Ramakrishnan K, Program Analyst, Cognizant Technology Solutions, Coimbatore

15.03.2024 – Guest Lecture on Green Computing: E-Waste Management through Recycling
Resource Person: Ms. Sithara A, Process Associate, Bosch Global Software Technologies Pvt. Ltd., Coimbatore

DEPARTMENT OF M.TECH CSE – LEADER'S TALK (2023–2024)

25.01.2024 – Leader's Talk on IoT with Cloud App Integration
Resource Person: Mr. P. Vishnu, AI Developer, Gateway Software Solution, Coimbatore

23.02.2024 – Leader's Talk on Recent Trends in Intelligent App Development
Resource Person: Mr. Sarath Krishnaswamy (Alumnus), Team Lead, Castle Labs, Coimbatore



FACULTY'S PARTICIPATION

DEPARTMENT OF M.TECH CSE-ACHIVEMENTS & INITIATIVES (2023-2024)

MoU & Related Activities

- Oracle Academy Membership renewed (08.04.2024 – 07.04.2026)
- Workshop on Oracle – SQL & Oracle DBA (11.09.2023 – 15.09.2023)

Coordinator: Mr. K.A. Dhamotharan, AP / M.Tech CSE,
Oracle Academy Coordinator

◆ Patents & Design Registrations

- Patent Published
 - Mr. K.A. Dhamotharan, Assistant Professor of CSE, published a patent titled Smart and Accurate Election Prediction System using Machine Learning on 06.10.2023 (Application No. 202221015150, The Patent Office Journal No.40/2023).
 - Ms. S. Kiruthika, Assistant Professor of CSE, registered a design patent for Compact Finger Wearable Mouse, with the date of issue on 08.11.2023.

◆ Career Development Programs

- A Career Guidance Programme on Adapting to the Changing Landscape of Work: Navigating Career Transitions in a Dynamic World was organized on 27.09.2023. The session was delivered by Dr. R. Selvapranambika, Career Guide (Scholar in Career Guidance) and Founder, Coimbatore.

◆ Skill Development & Value-Added Courses

- To enhance student employability, a Value Added Course on Industrial Specific Java Programming was conducted from 01.02.2024 to 29.02.2024 under the coordination of Dr. K. Lakshmi, Assistant Professor, MCA.

FACULTY'S PARTICIPATION

DEPARTMENT OF M.TECH CSE-ACHIVEMENTS & INITIATIVES (2023-2024)

◆ Faculty Journal Publications

- Faculty members have significantly contributed to research through journal publications.
 - Mr. K.A. Dhamotharan published a paper titled Wireless Sensor Network based Intrusion Detection Technique using Deep Learning Approach of CNN-GRU in the International Conference on Communication and Electronics Systems (ICCES 2023), IEEE Xplore (Part number CPP23AWO-Art, ISBN 979-8-3503-9663-8).
 - Mr. K.A. Dhamotharan also published Blockchain based Online Voting System in the International Journal of Advance Research and Innovative Ideas in Education (Volume 9, Issue 3, 2023, ISSN 2395-4396).
 - Ms. N.R. Raghapriya published Designing and Validating an MDS Hash Algorithm using the UVM Verification Framework and Checkers in the International Journal of Advance Research and Innovative Ideas in Education (Volume 9, Issue 2, 2023, ISSN 2395-4396).
 - Mr. A. Rajesh published Dynamic Pricing on Maximum Concurrency for Heterogeneous Instances using Hyper Parameter Optimization in Dueling Deep Reinforcement Learning in a Multi-Cloud Scenario in the Journal of Intelligent & Fuzzy Systems (Pre-press, pp.1-15, DOI: 10.3233/JIFS-236043, Published 22 January 2024).

FACULTY'S PARTICIPATION

DEPARTMENT OF M.TECH CSE-ACHIVEMENTS & INITIATIVES (2023-2024)

◆ Faculty Publications in Conferences

- Faculty members presented their research papers in reputed conferences.
 - Mr. K.A. Dhamotharan presented Wireless Sensor Network based Intrusion Detection Technique using Deep Learning Approach of CNN-GRU at the International Conference on Communication and Electronics Systems (ICCES 2023), PPG Institute of Technology, Coimbatore, held on 01-03 June 2023.
 - Ms. N.R. Raghapriya presented Designing and Validating an MD-5 Hash Algorithm using the UVM Verification Framework and Checkers at the International Conference on Computing, Communication and Networking Technologies (ICCCNT), IIT Delhi in association with IEEE Electronics Packaging Society on 06-07 July 2023.
 - Ms. S. Kiruthika presented Design and Fabrication of Multihand Planar Antenna for 5G and Next Generation Mobile Handset Applications at the International Conference on Sustainable Communication Networks and Applications, Bharath Niketan Engineering College, Theni, from 15-17 November 2023.
 - Ms. S. Kiruthika also presented in the AI and Blockchain Driven Technology to Develop Robust and Secure Applications conference at Sri Krishna College of Technology, Coimbatore, from 12-16 February 2024.

FACULTY'S PARTICIPATION

DEPARTMENT OF M.TECH CSE-ACHIVEMENTS & INITIATIVES (2023-2024)

◆ Faculty FDPs / STTPs Attended

- Faculty members actively enhanced their professional knowledge through FDPs and STTPs.
 - Mr. K.A. Dhamotharan, Mr. A. Rajesh, and Ms. N.R. Raghapriya attended a 6-day FDP on Neural Networks and Deep Learning at Madras Institute of Technology Campus, Chennai.
 - Ms. S. Kiruthika attended a 5-day FDP on Computational Thinking and Problem Solving at Amrita Vishwa Vidyapeetham University, Coimbatore.
 - Ms. S. Kiruthika also attended a 5-day FDP on AI and Blockchain Driven Technology to Develop Robust and Secure Applications at Sri Krishna College of Technology, Coimbatore.

◆ Faculty Workshops Organized

- Faculty members organized various workshops to impart practical skills to students.
 - Mr. A. Rajesh organized a workshop on Machine Learning in the MCA Lab from 16-18 August 2023.
 - Mr. K.A. Dhamotharan conducted a workshop on Social Media Marketing in CC 05 Lab from 22-23 September 2023.
 - Ms. S. Kiruthika organized a workshop on Blockchain Technology in CC 05 Lab from 03-04 October 2023.
 - Ms. N.R. Raghapriya conducted a workshop on Internet of Things in the MCA Lab from 13-14 November 2023.

FACULTY'S PARTICIPATION

DEPARTMENT OF M.TECH CSE-ACHIVEMENTS & INITIATIVES (2023-2024)

◆ Faculty Workshops Attended

- Mr. A. Rajesh attended a one-day workshop on Augmented Reality at KPR Engineering and Technology, Coimbatore.
- Mr. K.A. Dhamotharan attended a one-day workshop on Secure Android Coding and Testing at Coimbatore Institute of Technology, Coimbatore.



STUDENT'S PARTICIPATION

DEPARTMENT OF M.TECH CSE-ACHIVEMENTS & ACTIVITIES (2023-2024)

Paper Presentation

- K. Jeevitha presented a paper on Artificial Intelligence and Machine Learning at SNS College of Technology, Coimbatore on 11.09.2023 and secured the Second Prize. She also presented on Industry 4.0 at Jai Shriram Engineering College, Tirur on 20.10.2023, where she won the First Prize.
- S. Keerthika, R. Mangaiyarkarasi, and S. Srimadhumitha presented papers on Emerging Technology of Engineering at Jai Shriram Engineering College, Tirupur on 20.10.2023.

♦ Participation in Conferences and Seminars

• Conference

- Abnesh N, Gughan S, and Kalpana G attended a seminar on Research Directions on Missile Guidance Navigation and Control using AI held at Sri Ramakrishna Engineering College, Coimbatore during 14-15.12.2023.
- Vigneshwaran S, Yogesh K, and Yuvaprabha V participated in a conference on Dissemination of Robotics and AI in Agricultural Management System – A Mission for Sustainability at KPR Institute of Engineering & Technology, Coimbatore during 09-10.11.2023.

• Seminar

- Kannan G, Mohanapriya S, and Sanjay K took part in a seminar on Technological Upgradation for Improved Efficiency in Broadband Wireless Systems at S.A. Engineering College, Chennai on 14-15.12.2023.

♦ Workshops Attended by Students

- A total of 33 students from the department attended the workshop Top Engineers conducted at the Indian Institute of Technology, Chennai on 16.09.2023 and 23.09.2023. The participants included:
 - P.R. Akilan, M.P. Anesha, S. Bharatraaj, A. Deepan, R. Franklin, C. Ganesh, K. Harini, A. Haritha, S. Hema, K. Jeevitha, S. Jothika, S. Keerthika, V. Komala, R. Mangaiyarkarasi, D. Maheshwaran, M. Narashimman, S.L. Naveenkumar, D. Nithish, D. Pavithra, R. Pavithra, M. Pradeep, M. Preethimeena, S. Raghavasimhan, G. Sanjai, K. Santhakumar, S. Sasiganesan, S. Sahilulla, S.A. Sornamahi, T. Sowmiya, S. Shrimadhumitha, R. Srivasanth, P. Thillaiarasan, and N. Yukeshwaran.

STUDENT'S PARTICIPATION

DEPARTMENT OF M.TECH CSE-ACHIVEMENTS & ACTIVITIES (2023-2024)



Internship Training by Students

- K. Jeevitha, S. Keerthika, R. Mangaiyarkarasi, S. Shrimadhumitha, R. Franklin, S. Hari Prasanth, P.R. Akilan, C. Ganesh, and U.R. Kabilan completed their internship at NoviTech from 03.11.2023 to 24.11.2023.
- T. Sowmiya, K. Harini, R. Pavithra, N. Yukeshwaran, S. Sasiganesan, S.L. Naveen Kumar, and S. Bharatraaj completed their internship at Techvolts Software Pvt. Ltd. from 26.02.2024 to 13.03.2024.



ACHIVEMENTS



overall trophy won

3rd year got overall Trophy mam

M.Kumarasamy College of
Engineering, Autonomous
(Accredited with A grade by NAAC),
Karur



SPECIAL EVENTS



SEMINAR

CUG seminar on GATE and Higher studies

Date: 27/09/2023



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 PERUNDURAI - 638057, TAMIL NADU, INDIA

DEPARTMENT OF M. TECH COMPUTER SCIENCE AND ENGINEERING
&
MASTER OF COMPUTER APPLICATIONS
 Career Guidance Programme
 ON
"ADAPTING TO THE CHANGING LANDSCAPE OF WORK: NAVIGATING CAREER TRANSITIONS IN A DYNAMIC WORLD"
 on
27th September 2023

Guest Lecture
Dr. R. SELVAPRANAMBIKA
 Career Guide (scholar in Career Guidance)
 Founder, Coimbatore

THIRU. V. ANNADURAI
 President,
 Erode Sengunthar Educational Trust

THIRU. G. KAMALAMURUGAN
 CORRESPONDENT,
 Erode Sengunthar Engineering college

THIRU. S. N. THANGARAJU
 SECRETARY,
 Erode Sengunthar Educational Trust

Dr. V. VENKATACHALAM
 PRINCIPAL,
 Erode Sengunthar Engineering College

Dr. M. THAGAVEL
 HOD / M.TECH & MCA
 Erode Sengunthar Engineering College

VENUE: MCA Seminar Hall

FACULTY CO-ORDINATOR
Ms. J. ROHINI AP/M.Tech(cse) **Mr. A. Rajesh AP/M.Tech(cse)**

STUDENT CO-ORDINATOR
Mr. S. MATHAN II M.Tech(cse) **Mr. B. VASANTH II M.Tech(cse)**

SPECIAL EVENTS



INDUSTRIAL VISIT

1 days Industry Visit to Mysuru
Date: 28/11/2023
Total: 47 students and 2 faculty
Company Name :
Kayne Technology

SPECIAL EVENTS



EXTENSION ACTIVITY

Extension Activities

Date : 13/03/2024

Rally on Drug Addiction

Total students: 105 students and 10 faculty



SPECIAL EVENTS



EXTENSION ACTIVITY



Erode, Tamil Nadu, India
35, 4th St, Vendipalayam, Railway Colony, Erode, Tamil Nadu 638002, India
Lat 11.32953°
Long 77.73941°
23/03/24 12:02 PM GMT +05:30

Extension activities

Orphanage visit

Total students: 60 students and 3 faculty
(both II year and III year)

Place : Helping Heart orphanage Erode

Date : 23/03/2024



Helping Hearts Orphanage Erode, Tamil Nadu, India
35, 4th St, Vendipalayam, Railway Colony, Erode, Tamil Nadu 638002, India
Lat 11.329501°
Long 77.73936°
23/03/24 12:05 PM GMT +05:30

WORKSHOP

10 students of 2year M. TECH CSE went for one week Workshop on Robotics in Mardas Institute of Technology Chennai , 27/03/2024



SPECIAL EVENTS



EXTENSION ACTIVITY

Extension Activities on School visit

Date :28/03/2024

Place : Govt School, Chennai



SPECIAL EVENTS

2 days National level Symposium 2024

Date : 22/04/2024 to 23/04/2024

Total External Participants: 75



SPECIAL EVENTS

One day Industry visit

Date :18/05/2024

Company: Power Grid Cooperation India Limit, Dharmapuri

Total students: 54 students and 3 faculty

