



MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

Affiliated to Pondicherry University, Approved By AICTE,
Kaliheerthalkuppam, Puducherry-605107

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



ECE NEWSLETTER

Academic Year : (Jan 2023 -May 2023) Even Sem

PRINCIPAL MESSAGE



My heartiest welcome to all the young and budding Engineers who have joined in Manakula Vinayagar Institute of Technology (MVIT). With the guidance of our respected Chairman and Vice Chairman, with the help of highly qualified and dedicated faculty team, we will be moulding the students to the required shape which will make them industry-ready, employable and well disciplined. The Manakula Vinayagar Institute of Technology will strive hard to provide pleasant ambience and conducive atmosphere for moulding the young minds to scale greater heights in their chosen field of study. In our college we give top priority to academic excellence, innovation, and discipline. An effective Training and Placement Cell is in place to provide placement to all our students. Focus is given to Extra Curricular and Co-Curricular activities through various clubs and societies instituted to augment the students skills and knowledge. A state-of-the-art and up-to-date infrastructure facilities and good learning atmosphere are the hallmarks of our Institution. I hope all the students admitted in this Institution will enjoy their study in the campus. Let us all come together, build together, and achieve together with the blessings of Almighty for Tomorrow's India.

ABOUT THE DEPARTMENT

The Department was established in the year 2008 with a key focus to advance the skills of modern youth in the field of Electronics and Communication Engineering. Adequate emphasis is given to electronic design using innovative teaching methodologies. Emphasis is also given to the digital processing of information for efficient communication. Utmost care is taken in the perspective of imparting more practical knowledge to the student's community in the field of Electronics and Communication.

An expert team from National Board of Accreditation conducted on-site evaluation of the program from 24th to 26th August 2018; ECE department has been accredited for 3 years.

VISION

To emerge as a center of excellence nurturing innovative engineers in Electronics and Communication technologies who can address global challenges through multidisciplinary approaches, sustainable solutions, and ethical leadership

MISSION

DM1.Impart Quality Education in the field of Electronics and Communication Engineering through experiential learning, project-based curricula, and digital pedagogy to create industry ready professionals.

DM2.Foster research temperament by establishing state-of-the-art laboratories and innovation centers focusing on emerging technologies.

DM3.Enhance industry collaboration to facilitate internships, live projects, and technology transfer initiatives while promoting entrepreneurial mindset among students.

DM4.Develop socially conscious engineers capable of applying Electronics and Communication technologies for sustainable development and societal welfare.

PROGRAMME EDUCATIONAL OUTCOMES (PEOs)

Graduates of Electronics and Communication Engineering will

PEO1: Professional Excellence: Graduates will be employed with professional competency in Electronics and Communication, demonstrating expertise in emerging technologies.

PEO2: Research and Innovation: Alumni will excel in research initiatives and entrepreneurial ventures and lead in technological innovation in emerging Electronics and Communication domains.

PEO3: Sustainability: Develop and implement sustainable solutions in Electronics and Communication Engineering addressing global challenges while ensuring environmental responsibility and societal welfare

PEO4: Ethics and Leadership: Graduates will demonstrate ethical leadership in engineering teams while pursuing professional growth and contributing to the field through mentorship.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1: Products Development: Use modern tools to design subsystems for simple applications in Embedded Systems and VLSI.

PSO2: Design Thinking: Apply engineering concepts to find solutions in the fields of Communications, Signal/Image Processing.

PROGRAMME OUTCOMES (Pos)

PO1: Engineering knowledge : Apply the knowledge of mathematics , science , engineering fundamentals , and an engineering specialization to the solution of complex engineering problems.

PO2: 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.

PO3: 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.

PO4: 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.

PO5: 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.

PO6: 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.

PO7: 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.

PO8: Ethics : Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work : Function effectively as an individual , and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: 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.

PO11: 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.

PO12: 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.

STAFF ACTIVITIES:

1.Dr. S. Malarkkan, Dr.S.Arunmozhi, Mr.V.Rajesh and Mr.S.Baskaran visited Electronics Expo in south Chennai trade center on 13th Feb 2023



2.Dr.S.Arunmozhi invited as a guest to deliver the lecture in Saradha Gangadharan College in the topic of "Profiling and Career Opportunities", 22nd Feb 2023.

3.Dr.S.Arunmozhi have completed online course in UDEMY – "Completer Google class room" on 18th Feb 2023.

4.Mr. R.Sambath Kumar attended FDP on "Machine Learning in Big Data Analytics, Principles, Techniques and Challenges" Conducted by Narsimha Reddy Engineering College, Secunderabad from 13.02.2023 to 13.02.2023.

5.Mr.E.Ramassamy, Mr.V.Rajesh, Mrs.R.Vithiya, Mr.S Gowshameed, Mrs. D.Marygetsy attended FDP on "FDP on "OUTCOME BASED EDUCATION" Conducted by PPG Institute Of Technology, Coimbatore from 01.02.2023 to 09.02.2023.

6.Mr.E.Ramassamy, Mrs.R.Vithiya, Mr.S Gowshameed, Mrs.D.Marygetsy, Dr.S.Vinoth, Mrs.K.Alamelu attended Seminar on "Writing Research Paper and Article" Conducted by Manakula Vinayagar Institute of Technology on 20.02.2023.

7.Dr.R.Sofia done a course in Udey Titled "Building A Face Detection And Recognition Model From Scratch" dated 17.03.2023

8.Dr.S.Arunmozhi attended One week FDP on "Implementation of Examination Reforms Policy of AICTE" Conducted by D.Y.PATIL COLLEGE OF ENGG. Akurdi, Pune from 20.02.2023 to 25.02.2023.

9.Mrs.D.Marygetsy Published a Book chapter titled "Canopy height estimation at landsat resolution using convolutional neural network" ESN Publication ISSN 978-93-95196-43-7, February 2023.

10.Dr.R.Sofia attended FDP on "Cyber Security: Global Hacktivism, Defense Mechanism And Digital Forensics " Conducted by Saveetha Engineering College from 01.02.2023 TO 11.02.2023.

11.Dr.R.Sofia done a course in Udey Titled "Business Model Canvas" dated 11.02.2023

12.Mr. R.Sambath Kumar attended FDP on "Design of High-frequency Antennas for Real time Applications (DHARA-2023)" Conducted by GMR Institute of Technology & V R Siddhartha Engineering College on 14-18 March, 2023.

13.Dr. R. Sofia Published chapter titled "Human Emotion and Artificial Intelligence" Notion Press, February 2023.

14.Dr. S.Vinoth Published a paper titled "High photocurrent performance of nebulizer sprayed Bi2S3 thin films by a novel Cu-La doping strategy" Journal of Photochemistry & Photobiology, A: Chemistry, Elsevier, March 2023

15.Dr. S.Vinoth Published a paper titled "Highly improved photo-sensing ability of In2S3 thin films through cerium doping" Optical materials, Elsevier, March 2023.

16.R.Sambath Kumar attended FDP on "Machine Learning In Big Data Applications And Security Challenges " Conducted by MLR Institute of Technology, Telangana on 24th - 29th April, 2023.

17.Dr. A.Shankar Published a paper titled "Intelligent assistant to predict and control the home appliances in user environment through brain computer interface using hybrid deep learning model" Journal of Complementary Medicine Research, ISSN: 2146-8397 Vol. 14, No. 2, 2023, pp.123-128.

18.Mrs.D.Marygetsy Published a paper titled "Error Efficient Approximate Computing using Adder Optimization technique for 32-bit RCA "International Journal of Engineering and Technology, ISSN 2395-1303 May 2023.

19.Mrs.D.Marygetsy Published a IEEE Conference "An Innovative Shopping System with GSM Based Automation for Physically Challenging and Old Age People" 3rd International Conference on Innovative Practices in Technology and Management (ICIPTM), Uttar Pradesh, India, May 2023.

20.Mrs.D.Marygetsy, Mrs.K.Alamelu, Ms.R.Vijiyalakshmi, Mr.M.Bhuvanesh and Mr.Srimannarayanan attended FDP on "High Impact Teaching Skills" Conducted by Manakula Vinayagar Institute of Technology on 26th and 27th June 2023.

STUDENT'S ACTIVITIES:

1.Srinidhi K Valliappan, P.Sakthidevi, P.S Dhivya and S.Shanmathy from II Year A Section have attended the workshop in the topic of "Build and Fly your own drone", on 19th February 2023.

2.Cedrin N, Naveenraj M, Nithish kumar R, Sriram G of II Year ECE Participated in Circuit Debugging at Puducherry Technological University and Won Prizes. on 16.03.2023

3.Sanjay S, Akshaya Kumar S, Vignesh R of II Year ECE Participated in Paper Presentation –Eventila at PSG Institute of Technology and Applied Research, Coimbatore on 20.03.2023 and 21.03.2023.

4.S.Pugazhnagai from final year ECE has completed Microsoft Excel and MicrosoftWord in mind luster through online on 28th March 2023.



5.Yuvan Prabhu. R, Kirupaa Sri Ram. V, Nivedhini. C, Jayapriya. B and Monika. J of IV ECE has successfully completed the Oracle Certified Associate by Oracle university 12.04.2023

6.S.Gayathri, III/ECE-B have completed the course "Google Data Analytics" in the online portal Coursera



EXTENSION AND NSS ACTIVITY

- 1.III year participated in VIRTUSA JATAYU SEASON from which three students cleared second round on Feb 2023.
- 2.II year and III year students have pitched their ideas in the pitching event conducted in Manakula Vinayagar institute of technology on 22nd Feb 2023.
- 3.II Yr ECE Students Participated in Yoga Day on 15.06.2023



PRODUCT DEVELOPMENTS AND CONSULTANCY

1. Memorandum of Understanding was signed with "KAIVALYA TECH SERVICES PVT LTD" on 20th March 2023.



- 2.Memorandum of Understanding was signed with "VAYUSASTRA AEROSPACE PVT LTD" on 19th march 2023.

GUEST LECTURE /WORKSHOP/ SPECIAL LECTURES.

- 1.Mrs.R.Vithiya conducted a workshop for III Year students on the topic of "Workshop on Design Thinking", on 16th Feb 2023.
- 2.Mr.V.Rajesh a workshop for IV Year students in the topic of "Workshop on Innovation & Design Thinking", on 22nd February 2023.



3. Workshop on the topic of "Industrial Automation" was conducted for II year students on 27th Feb 2023 by the resource person Mr. S.Baskaran, R&D, PLC-SCADA, and MVIT.
4. Mr. E.RAMASSAMY organized STELLAR'S TROPHY (A SPORTS EVENT) for 32 Teams from Various Colleges on 24th & 25th February 2023.



5. II year students have gone through the implant training in "Hindustan Unilever Ltd" from 22nd to 28th Feb 2023.
- 6.Dr.R.Sofia organised a workshop for III Year ECE students in the topic of "Image Processing Using Matlab" on 14th March 2023.



7. Mrs.D.Marygetsy organized the workshop for II year students in the topic of "Prototype Design" by Mrs.Deepa venkat proprietor,Kaivalya Tech Services Pvt Ltd on 20th March 2023.

- 8.Mrs.R.Vithiya organizes the guest lecture on the topic of "EMERGING TECHNOLOGIES IN WIRELESS DRONE" by Mr.Jagadeesh Kanna, CEO, Vaayusastra Aerospace, IITM, Research park, Taramani, Chennai on 18 th march 2023
- 9.Dr.S.Arunmozhi organized guest lecture on the topic of "IPR" by Mr.Jayakumar on 20th March 2023.



- 10.Mr.E.Ramassamy arranged industrial visit for III Yr students to ISRO on 17th March 2023.

- 11.Mrs.R.Vithya organized inter college workshop in the topic of "DRONE DESIGN" on 20th April 2023, Resource person was Mr.Jagadeesh Kanna, CEO, Vaayusastra Aerospace, IITM, Research park, Taramani, Chennai



- 12.Mr.E.Ramassamy organized the inter collage workshop in the topic of " Digital Twin" on 6th April 2023,Resource person was Mr.Ashokkumar Manisekaran, Founder,Priya Labs.

- 13.Mr.Sivaraj conducted workshop for the 2nd year ECE students in the topic of "Microwind" on 08th April 2023.



- 14.Mrs.D.Marygetsy organized industrial visit for 3rd year students to EATON on 19th April 2023.

- 15.Dr.S.Arunmozhi chaired the inter college event "National Technology Day" on 11th May 2023 at MVIT.



ACHIEVEMENTS AND AWARDS

1. E.Ravikumar from II Year B Section won 2nd prize in code debugging competition Christ Tech 2023 conducted by Christ college of engineering on 10th Feb 2023.
2. Mr.M. Sobanraj, who was in his final year took the IELTS exam and was accepted into Swansea University for higher studies in MS-Financial Management on March 24th, 2023



3. S.Vishnu from III ECE has appeared for gate exam and got 1st gate scorer on the month of March 2023.
4. Dr.S.Arunmozhi was invited as a jury member for the training program in the topic of "Capacity Building" held on 27th April 2023 in Saradha Gangadharan College, Puducherry.



5. Mr.Sivaraj have received award from “Kalai elakiya arakatalai” by Thitamil Kalai Ilakkiya Arakattalai on 14.05.2023



6. Project Expo was conducted for the final year students on 26th May 2023.



7. Faculties from ECE department received the academic excellence award and cash prize in fruition 23 on May 11 2023.

8. On the women's day celebration Women's Empowerment Cell awards the MVIT women faculty on 8th March 2023

EDITORIAL TEAM

Faculty In-Charges

Mr.P.MURALI, AP/ECE

Mr.R.SAMBATHKUMAR, AP/ECE

Students Editors

SANTHOSHKUMAR.K
III YR-ECE

PARTHIBAN . K
IV YR-ECE

Thank you