MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

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

DEPARTMENT OF
ELECTRONICS AND COMMUNICATION ENGINEERING

ECE TIMES

Academic Year : (June 2022 -December 2022) Odd 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 to26th 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.Arunmozhi tutored VEDIC math for admitted first year student (batch 2022-2026) from 17th to 22nd Aug 2022.

2. D.Marygetsy completed MBA-HR in Pondicherry University (Distance)Aug2022

3. Dr.S.Arunmozhi, D.Mary Getsy, Dr. R.Sofia, Mr. V.Rajesh and Mr. E. Ramassamy success- fully trained as Innovation Ambassador (Advance level) on 25th August 2022 organized by IIC-MoE's INNOVATION CELL.

4. K.ALAMELU attended a FDP in "How to Improve your research skills" on 22nd & 23rd August 2022 organized by Puducherry Technological University.

5. Dr.A.Shankar has attended the FDP on IP Awareness/Training Program, conducted by Intellectual Property office, India, dated on 02.08.2022.

6. Mr.P.Murali has attended the FDP titled "Emerging Research Trends in Computing Technologies" conducted by Dr. M.G.R Educational and Research Institute from 28th Nov to 2nd Dec 2022.

7. Mr. R.Sambath Kumar and Mr.P.Murali has attended the FDP on Emerging Research Trends in Computing Technologies, by Dr.MGR Educational and Research Institute from 28th Nov to 2nd Dec 2022.

8 Mr. R. Sambath Kumar has attended International Seminar on FAH Science, Chettinad Academy on 3rd Dec 2022.

9. Dr.R.Sofia attended FDP on 3D Bio Printing and its Application, conducted by Biomedical Engineering Society in Karpagam Academy of Higher Education from 12th Dec to 17th Dec 2022.

10. Mrs.D.Marygetsy and MrsR.Vithiya has attended the FDP titled Innovation in Recent Trends in Computation from JIS university from 28th Nov to2nd Dec2022.

11 Mr. S. Gowshammed, Mr. Ramassamy.E and Mrs. R. Vithiya has attended FDP on social application on Machine Learning, Conducted by Shri Vishnu Engineering College for Women from 26th to 30th Dec 2022.

12. Mr.C.Thiyagarajan has attended the Workshop on "Python for Data Analytics", conducted by Pondicherry University, Karaikal Campus dated on 26.09.2022

13. Mr.Kumaran has attended HeadStart season8 in Virtusa on 29th Sep 2022, Hyderabad

14. Dr. S. Vinoth Published a paper titled "Enhanced structural, optical, and photo sensing properties of Ni-doped Co_3O_4 thin films prepared by nebulizer spray pyrolysis method, Physics B: Condensed Matter, Elsevier",DOI: https://doi.org/10.1016/j.physb.2022.414492, SCI Indexed.

15. Dr.R.Sofia presented a Paper" Covid19 detection from Xray scans using Machine Learning" in the conference ICIECS 2022.

16. Mr.M.Sivaraj and Mr. Kumaran has presented paper title "Enhancing train delay prediction using faster RCNN" in ICICEECI'22, dated 14.12.2022.

17. Dr. S.Arunmozhi, Mr. V. Rajesh and Mr.A. Baskaran has filed a patent "A Barcode Reader En-abled First Aid Box for Visually challenged people".

18. Dr. S. Arunmozhi and Mr.V.Rajesh has filed a patent "An Adjustable Automated Eye Drops Dispenser".

19. Dr.Yazhiniyan has published 4 patents

- An Artificial intelligence based data management for IoT devices using block chain technique and working method thereof- Published and publication No. 202241061041.
- A shared haptic interaction with prioritizing the control in augumented reality-Published-202241060635.
- Autonomous driving assistance tool by cognizance and compter vision fusion method-Published-20221055586.
- A system for evaluating human relation management in an organization using scanner and smart de-vices and working method thereof-Published-202241061393.

20. Dr.S.Arunmozhi has got acertificate after completing the test in AICTE PRAKH

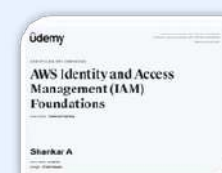**21.** Dr.R.Sofia done a course in Udemy "OBE and academic quality assurance"

22. Dr.R.Sofia completed the course in the Udemy platform "HOW TO WRITE A TEACHER'S LESSON PLAN FOR BEGINNERS" on 29th December 2022

24. Mr.Shankar has completed the online course in the Udemy platform "Practical Cisco Networking Labs in Cisco Packet Tracer" on 10th December 2022.

24. Mr.Shankar has completed the online course in the Udemy plat form" AWS Identify and Access Management (IAM) Foundation" on 10th December 2022.

Student's activities:

1.Final year students have participated in AIM THE PUDUCHERRY CHAPTER conducted and sponsored by Atal Incubation Centre-PTU

2.SanthoshKumar.K, Jaisiya.R, Yuvalakshmi V.P and Kanimozhi.P has participated in National level contest in Sri Manakula Vinayagar Institute of Technology dated on 14.09.2022

3.Papitha.A of IVECE has successfully completed the Cyber Security offered by Digital Adda 23.09.22

4.Papitha. A of IVECE participated in the Quiz International Olympic Day, conducted by Miranda House, DU 23.09.22.

5.Daranish.SP, IIIECE has participated in Youth Talk conducted by ICT academy on27.09.22.

6.Vishnu.S, SanthoshKumar.K, of III ECE has participated in Nation all ever symposium , conducted by University college of Engineering, on October 2022.

7.Reventh K and Cedrin N of II ECE has participated in RC plane fabrication workshop conducted by KPR Institute of Engineering and technology on 7th October 2022.

8. For III year ECE students AWS course was conducted from 4th to 10th October 2022 in centre of excellence lab.

9.S.Vishnu III-B has completed JAVA Script programming in Lets Upgrade 5 day's boot camp on Oct 2022

10.S.Vishnu III B has completed UI/UX course through online portal Great learning on Oct 2022.

11.Vishnu.S has completed 7 online certification courses in Lets Upgrade platform.

12.Yuvareshma S, Rajasri k, Dheen .K, BethuAswin, Ezhil E and Saravanan S has done a internship in Twilight IT solutions from 13.09.2022 to 12.10.2022

13.Nivedhini, Jayapriya.B, KirubaSriram, YuvanPrabhu, Monika has done a internship in virtusa from 27.05.2022 to 29.11.2022

14.Gayathri.S has participated in MCCEES-2022 conducted by ACET on 25thNov2022 and won the First Prize

15.Pannerselvan and sharan of II year ECE has participated in Online Quizont he Constitution of India conducted by Govt. of India Ministry of Parliament Affairs on 26th Nov 2022

16.II and III Year students participated in the Pondicherry University sports conducted on December 2022.

17.S.Visnu III Year completed the course in the Lets Upgrade "C++ Programming Essencial Boot- camp" on 20th to 28th December 2022.

18. B.Nithya sri, P.Suvetha, from III-A have completed the in plant training in Television Broadcasting from 19-12.2022 to 23-12-2022 at Door darshan Kendra ,Puducherry.

19.K.V Sreenidhi from II Year attended the VI Annual HR Conference held on 18thDecember2022.

20.Navinkumar, Santhosh kumar and Fazil has attended the Techfinix'22 in Paavai Engineering College

VALUE ADDED COURSE

1.III Year student shave under gone Value added course sin several computer oriented programming on Sep 2022.

2.Global Certification Exam conducted for IV-ECE students in the topic of "Java Programming" on 12th and 13th December 2022

3.B.Tech ECE II year III semester attended the value added course from 21st Nov to 26th Nov 2022 in Train lab "Python Programming"

EXTENSION AND NSS ACTIVITY

1.NAAC Mock inspection was arranged and peer member visited to our department on September 28th 2022

2.Research status got approved from Pondicherry University on 3rd December 2022.

3.NACC inspection visit was carried out on 7th and 8th October 2022.

4.PEC-ATAL Incubation center conducted a exhibition in Thanthai Periyar Girls Higher Secondary School on 23.11.2022 in that our students V. Githendra, G. Jayachandran, Chandru, and Ashwinkumar Presented and given the project to school:

- Eye paralyses
- Peltier based insulin carrier
- Temperature Monitoring Boiler

Product Developments and consultancy

1. Hands-On Sensor Based Products was displayed and explained in R&D Lab on 30th September 2022

2. Automatic Portable Paper Plate Machine was developed in R&D Lab on September 2022.

3. Signed a MOU with Praya labs on 23/11/2022

Guest Lecture /workshop/special Lectures

1. Mr.Baskaran R&D delivered a guest lecture in the topic of "PLC-SCADA" on 21st October 2022

PROGRAM ORGANIZED

1. Dr.S.Arunmozhi organized an External workshop for II year students, expert Mr.Raja in the topic of "Basic Electronics" on 20th October 2022

2. Dr.S.Arunmozhi organized and conducted workshop in the topic of "Outcome Base Education" for the newly joined faculty members of MVIT, on 29th October 2022.

3. Dr.S.Arunmozhi has invited for PhD viva-verse as an external from St.Peter's University, Avadi, Chennai on 21st October 2022

4. Dr.Lakshmi Priya presented a guest lecture in the topic of "AIML" on 7th October 2022.

5. World Television day was celebrated in the Dept and on behalf of that Dr. J .Bala Vishnu presents Guest lecturer in the topic" Benefits and Awareness of television in society" 26.11.2022

6. Mr. A.AASHIQ AHAMED, presented a guest lecture in the topic of VLSI DESIGN – MODERN WIRELESS ARCHITECTURE on 26.11.2022

7. Mr. ASHOKKUMAR MANISEKARAN, delivered a guest lecture on the topic DIGITAL TWIN on 26.11.2022

8. Mr. P. Jagadeesan, Scientific officer, Cosmic Rays labs, delivered a guest lecture on the topic "Fast Electronics in Practical Physics" on 11.11.2022.

9. Workshop about NIRF Frame Work 2023 on 25.11.2022.

10. Photoshop workshop by J.Jegan, Technical assistant. Was conducted in the month of November. 2022

11. Motivational speech on MOM(Me on Mission) by Ms. Rajalakshmi, Project Manager, Antares Publishing Service for II year ECE students on 16.11.2022

12. Dr.S. Arunmozhi and Mr. V. Rajesh coordinated(IICIA Coordinators) the MVIT idea Hackathon on 23 Nov 2022

13. Conducted the Exhibition on Consumer Electronics on 26.11.2022 in the Lecture hall 213 for III year ECE students.

14. II year ECE A sec Students went to industrial visit for CODOID, Tidal park, Chennai on 18.11.2022

16. Dr.R.Sofia organized the workshop for III Year students in the topic of "TINKERCAD AND CISCO PACKET TRACER" on 21st December 2022.

17. II year ECE B sec students went to Madras Science & Industrial Resources" #40, 2nd Floor, 2nd St, Padmavathy Nagar, Chromepet, Chennai on 18.11.2022

18. Mr.V.Rajesh,Mr.K.Kumaran,Mr.Ramassamy,Mrs.Vidya and Mr.Gowshammed Attended the ICT academy event in the topic of " THE GLOBAL IMPACT OF 5G IN THE TELECOM AND ICT SEC TOR" on 21st December 202

19. Dr.S.Arunmozhi organized the workshop in the topic of "MOODLE Quiz creation" for the faculty of ECE department on 28th December 2022.

ACHIEVEMENTS AND AWARDS

1.Till Nov 2022 43 students got placed in ECE among the total strength of 86(includes eligible and not eligible students)

2.D.Marygetsy Awarded as a Best Women Faculty by Novel Research Academy Puducherry, on Sep 5th 2022.

3.Dr.S.Yazhiniyan - Jury for Paper presentation , ACET, Puducherry 25/11/22.

4.S.Vishnu from III Year B Sec have won first prize in Technical-Circuit Debugging in University College of Engineering, Tindivanam on 23rd October 2022

8.R.Yuvan Prabhu from IV –A have won 2nd Prize cash award (1500) in the paper presentation con ducted by MRK institute of technology, Cuddalore on 27th October 2022

6.Mr.Shankar has completed the training program under "National Intellectual Property Awareness Mis sion" on 16th December 2022

7.S.Vishnu from III Year B Sec is a member of AWS Emerging Talent community from October 2022.

5.K.Vinoth from II year B sec has awarded as Dream student by the organization Dr.Abdul kalam education and nature foundation on 15th October 2022

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