NEWSLETTER-ODD SEM(21_22)

DEPARTMENT OF
ELECTRONICS AND COMMUNICATION

ABOUT THE INSTITUTION

Manakula Vinayagar Institute of Technology (MVIT) was established in 2008, with a view to provide quality technical education to young aspirants. The institution is affiliated to Pondicherry Central University and is approved by AICTE, New Delhi.

Our college is professionally managed and guided by the members of the board of Management with vast experience, knowledge and academic excellence, with a vision to achieve the most preferred position globally.

The high performance of our Institution is witnessed by the results produced by our students in the university exams. Our Institution has acquired enviable status for maintaining highest order of discipline.

MVIT is revitalizing itself, to face the challenging expertise with reputed team of faculty. We facilitate to produce efficient Professionals who can meet the demands of the expectations and shine in their profession through innovative ideas, knowledge and team work.

CHAIRMAN'S MESSAGE

Sri Manakula Vinayagar Educational Trust was formed with the objective of imparting quality technical education, medical education and other relevant field of education especially to the weaker section of the society.

The Trust is sponsoring the colleges with the state of art facilities and modern technologies for making our students employable as well as to become successful entrepreneurs. We are running all the colleges in the highest order of discipline among the students and personally take care of their studies, successful completion of the course. We take utmost care about students future and also believe that they all are our customers.

All the colleges have got highest order of discipline, won the reputation and opinion of public and industrialists. That is the success of our institutions which makes us to be a leader in Education.

VICE CHAIRMAN'S MESSAGE

The transition from school to college is a very big step in life. By choosing to create a future for yourself from our institution means that we, the teachers and management at MVIT are responsible for your successful graduation and growth. You will cherish every day at your college, right from day one, you will feel welcome by all of us here – your seniors, your new professors, and members of administration you will get to interact with. What's more the energetic environment will have you charged up to achieve your dream with confidence like never before.

It is your career path that you have now embarked upon, which will be a remarkable journey in itself that will prepare you for a life beyond college. We pray and will work with you to see you become one with the society where your contribution will make a definitive difference to our world.

The commitment from us begins from day one - to work with you and walk with you through each day all through the years you will spend here which is your home away from home. The learned staff members and the ever accessible Management are always with you to guide you through your path and help you nurture your dreams and fulfill them – by empowering you to realize your true potential. Be it studies, sports or any extracurricular activities, you don't just graduate with a degree and a certificate – but become a graduate of life and a true citizen of the world of tomorrow.

SECRETARY'S MESSAGE

It give me immense pleasure to present few words as prologue to Seventh Issue of MVIT News Letter. I congratulate all the faculty and students and the editorial board for bringing out such a beautiful issue. Empowerment of students for their all round development through education is our appreciated motto.

Today Higher Education means much more than merely acquiring knowledge. It is acquisition of knowledge and skills, building character and improving employability of our young talent, the future leadership.

I am proud of being the Secretary of SMVE Trust dedicated to the causes of better India. Come a let's give our best and make the institution as a modern temple of learning through our diligence, devotion and dedication. Wishing you all the best...!

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 24 th to 26 th 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

1. 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.

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

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

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

PROGRAMME EDUCATIONAL OBJECTIVES

Graduates of Electronics and Communication Engineering will

PEO 1: Professional Excellence : Graduates will be employed with professional competency in Electronics and Communication , demonstrating expertise in emerging technologies.

PEO 2: Research and Innovation : Alumni will excel in research initiatives and entrepreneurial ventures and lead in technological innovation in emerging Electronics and Communication domains.

PEO 3 : Sustainability : Develop and implement sustainable solutions in Electronics and Communication Engineering addressing global challenges while ensuring environmental responsibility and societal welfare

PEO 4 : 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)

PSO 1: Products Development : Use modern tools to design subsystems for simple applications in Embedded Systems and VLSI.

PSO 2: Design Thinking : Apply engineering concepts to find solutions in the fields of Communications, Signal/Image Processing.

PROGRAMME OUTCOMES

Engineering Graduates of will be able to:

PO 1: 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.

PO 4: 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.

PO 5 : 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.

PO 8: 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.

PO 11 : 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

- Value added course on "VEDIC MATHEMATICS" was conducted by Dr.S.Arunmozhi for the 12 students on 30 august to 3 september 2021.

- Dr.S.Arunmozhi was awarded as " Excellence in Research" by the Novel Research Academy, Pondicherry on 5 september 2021

- Dr.S.Vinoth published a paper in Journal of Material science in September 2021.

- ATAL FDP was Organised by Dr.S.Arunmozhi and Dr.S.Vinoth on the Topic of "Nano Science for Nano Materials" on 20 to 24 september 2021.

- Mr. K. Mahendran presented the lecture on "Hands-on Training on antenna design using HFSS tool" held on 11.10.2021 for the students of final year ECE.

- Mr.R.Sambathkumar attended a FDP on " Next Generation Wireless Technogies: 5G and Beyond" from 20.10.2021 to 25.10.2021 organized by MVIT, Puducherry.

- 7 staff members have attended a DHR - ICMR Academy FDP on "Artificial intelligence (AI) enabled translational Research in health informatics" from 25.10.2021 to 29.10.2021 organized by MVIT, Puducherry.

- DHR-ICMR sponsored five days national level workshop on" Artificial intelligence (AI) enabled translational Research in health informatics "organized by Dr. B.Lakshmi Priya Post-Doc Fellow, Department of Surgical Gastroenterology, JIPMER held on 25.10.2021 to 29.10.2021

- Mrs. Marygetsy attended a ESSGEE DIGISKILLS Academy Online FDP on "National Level workshop on Website Designing and Digital Marketing" from 8.10.2021 to 18.11.2021.

- Dr. S.Vinoth presented the special lecture on "Introduction to Nanoscience & technology and its energy application "held on 03.11.2021 for the students of Third year ECE.

- Mr.M.Sivaraj and Mrs.K.Alamelu conducted a guest lecture on "Data Communication and Network Security" held on 13.11.2021 for the students of Third year ECE.

- Mr.R.Sambathkumar attended a CSIR Academy Online FDP on "ROLE OF DEEP LEARNING IN PANDEMIC ERA" from 15.11.2021 to 16.11.2021 organized by IFET, Villupuram.

- Mrs. Marygetsy attended a CSIR Academy Online FDP on "ROLE OF DEEP LEARNING IN PANDEMIC ERA" from 15.11.2021 to 16.11.2021 organized by IFET, Villupuram.

STAFF ACTIVITIES

- Dr.S.Arunmozhi presented the Special lecture on "EMI & EMC" held on 19.11.2021 for the students of second year ECE.
- Mrs.D.Marygetsy presented the Special lecture on "Industrial Processor" held on 27.11.2021 for the students of second year ECE.
- Mr.S.Gowshameed presented the Special lecture on "QR Code Scanner" held on 27.11.2021 for the students of Third year ECE.
- Dr.R.Sofia presented the Special lecture on "Artificial Intelligence" held on 27.11.2021 for the students of Third year ECE.
- Mrs.R.Vithiya presented the Special lecture on "IoT in wireless Communication" held on 27.11.2021 for the students of Third year ECE.
- Mr.K.Mahendran presented the Special lecture on "Flexible Electronics" held on 27.11.2021 for the students of second year ECE.
- Mrs.Alamelu presented the Special lecture on "Evolution of 1g to 5g and beyond 5g" held on 27.11.2021 for the students of Third year ECE
- Mr.R. Sambath Kumar conducted a guest lecture on "Optical Networking "held on 25.11.2021 for the students of Third year ECE.
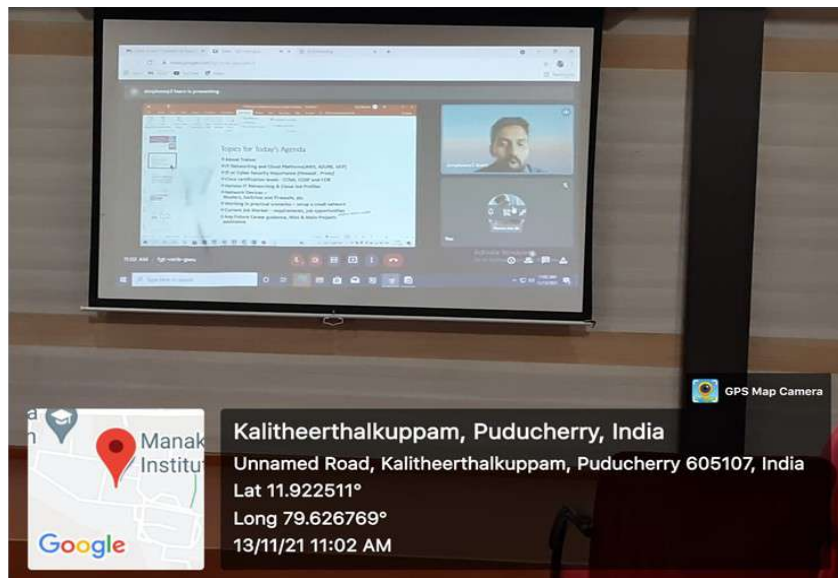- Mr.K.Mahendran conducted the Workshop on "Testing of Electronic Devices in Hardware" held on 24.11.21 to 25.11.21 for the students of second year ECE.
- Dr.S.Arunmozhi organized a basic electronics workshop for II year ECE students.
- Dr.S.Arunmozhi published Understanding Chinese cultural values and cultural psychology paper in Aggression and Violent Behavior, Pergamon, Elsevier journal.
- Dr.S.Arunmozhi published Chapter 11 Automated Detection of COVID-19 Lesion in Lung CT Slices with VGG-UNet and Handcrafted Features paper in Digital Future of Healthcare, CRC press.

STUDENTS ACTIVITIES

- One Batch of won 2 prizes in Vishwakarma awards which is conducted on 5 September 2021.
- Four students from ECE Department have won prize in Toycathon on 3 September 2021.
- Third Year students Conducted workshop on Arduino for II year students. mozhi

PROGRAM ORGNIZED

- AICTEsponsored FDP on "Nano Science for Nano Materials from" 20.9.2021 to 24.9.2021 organized by ECE department.
- MOU was signed with Maven silicon center of Excellence in VLSI on 30 September 2021.
- DHR-ICMR sponsored five days national level workshop on" Artificial intelligence (AI) enabled translational Research in health informatics "organized by Dr. B.Lakshmi Priya Post-Doc Fellow, Department of Surgical Gastroenterology, JIPMER. Held on 25.10.2021 to 29.10.2021.

DHR-ICMR sponsored five days national level workshop on" Artificial intelligence (AI) enabled translational Research in health informatics "organized by Dr. B. Lakshmi Priya Post-Doc Fellow, Department of Surgical Gastroenterology, JIPMER held on 25.10.2021 to 29.10.2021

PROGRAM ORGNIZED

Mr.R.Sambath Kumar Organised a guest lecture on "Optical Networking" held on 25.11.2021 for the students of Third year ECE. Mr.V.Palani Tech analyst. Standard charted Bank, Chennai.

Mr.K.Mahendran conducted the Workshop on "Testing of Electronic Devices in Hardware" held on 24.11.21 to 25.11.21 for the students of second year ECE

PROGRAM ORGNIZED

Dr.S.Arunmozhi organized a basic electronics workshop for II year ECE students on 24.11.2021

Mr.M.Sivaraj and Mrs.Alamelu conducted a guest lecture on "Data Communication and Network Security" held on 13.11.2021 for the students of Third year ECE. Mr.Nagareddy , Professional Engineer. IT networks and cloud Security Consulatant.

PROGRAM ORGNIZED

ATAL FDP was Organized by Dr.S.Arunmozhi and Dr.S.Vinoth on the Topic of " Nano Science for Nano Materials on 20 to 24 September 2021.

Value added course on "VEDIC MATHEMATICS" was conducted by Dr.S.Arunmozhi for the 12 students on 30 august to 3 September 2021.