MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY
Kalitheerthal kuppam, Madgadipet 605107

NEWSLETTER-ODD SEM (20_21)

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 24th to 26th August 2018; ECE department has been accredited for 3 years.

VISION

The department aspires to produce dexterous professionals, competent Researchers and entrepreneurial leaders for the benevolence of the society.

MISSION

Department of Electronics and Communication Engineering is committed

Higher Order Thinking: To invoke higher order thinking among the students by means of comprehensive teaching and learning process.

Competency: To provide training on cutting-edge technologies to improve the competency of the students.

Continuous learning: To promote innovation through providing state of-art facilities and active industry institute interaction.

Entrepreneurship: To facilitate the students to improve their leadership and entrepreneurship skills with ethical values.

PROGRAMME EDUCATIONAL OBJECTIVES

Graduates of Electronics and Communication Engineering will

PEO1: Employability: Our Graduates shall be suitably employed in allied industries/services with professional competency and knowledge of modern tools..

PEO2: Higher Education: Our Graduates shall be capable to pursue higher studies/research in the field of engineering and management.

PEO3: Entrepreneurship: Our Graduates shall be prepared for a successful career by meeting ever increasing demands required by Electronics and communication profession and enable them to become an entrepreneur.

PEO4: Ethical: Our Graduates cultivate professional and ethical attitudes with effective communication skills, team work and multidisciplinary approach related to engineering

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

Engineering Graduates of will be able to:

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.

STAFF ACTIVITIES

1. Dr.R.Valli and Dr.S.Arunmozhi coordinated IEEE Student Branch sponsored Three Days FDP on "Art of Writing Research Articles and Funding Proposals" from 21.5.2020 to 23.05.2020.

2. Dr.R.Valli and Dr.S.Arunmozhi conducted an online course on "Online Teaching" for school teachers from 11.05.2020 to 15.05.2020.

3. Dr.S.Arunmozhi has conducted a workshop on "Online Teaching" for the faculty of Sri ManakulaVinayagar Nursing College on 22.05.2020 and 23.05.2020.

4. Dr.D.Saraswathi conducted an online course on "Mobile App Development" for twelfth standard students from 04.05.2020 to 08.05.2020

5. Dr.B.LakshmiPriya conducted an online course on "Artificial Intelligence – Introduction and Applications" for twelfth standard students from 04.05.2020 to 08.05.2020.

6. Dr.D.Saraswathi and Dr.B.Lakshmi Priya conducted a workshop on "Signal and Image Processing using MATLAB" for III and IV year students from 14th to 19th June 2020.

7. Dr.B.Lakshmi Priya delivered a session on "Deep learning for Visual Computing" as part of Webinar Series on "AI & ML Applications in Image Processing Using Modern Tools" organized by MSRIT, Bangalore on 14th July 2020.

8. Dr.D.Saraswathi delivered a session on "Introduction to YOLO Deep Neural Networks for Object Detection" as part of Webinar Series on "AI & ML Applications in Image Processing Using Modern Tools" organized by MSRIT, Bangalore on 16th July 2020.

9. All faculty members attended one week FDP on "Digital Teaching Techniques" organized by ICT Academy during 17.08.2020 to 24.08.2020.

10. Dr.D.Saraswathi conducted an Online Certificate Course on "Mobile App Development" for the first year admitted students during 7th to 11th September 2020.

STAFF ACTIVITIES

11. Dr.B.Lakshmi Priya conducted an Online Certificate Course on "Artificial Intelligence – Introduction and Application" for the first year admitted students during 21st to 25th September 2020.

12. Dr.B.Lakshmi Priya delivered a session on "TensorFlow" in the AICTE (training and Learning Academy (ATAL) FDP on Recent Trends in Data Science and its Tools for Researchers conducted by IFET College of Engineering, Villupuram on 29th September 2020.

13. Mr.V.Rajesh and Mr.E.Ramassamy conducted a two Days Workshop on "Internet of Things (IoT) using CISCO Packet Tracer for interested students of III Year.

14. Dr.S.Padmapriya attended an AICTE Training and Learning (ATAL) Academy Online FDP on "Data Sciences" from 2020-9-7 to 2020-9-11 organized by the University of Hyderabad.

15. Dr.D.Saraswathi and Dr.B.Lakshmi Priya attended a Virtual FDP on Fundamentals of AI organized by ICT Academy from 07.09.2020 to 12.09.2020.

16. Dr.B.Lakshmi Priya attended a AICTE Training And Learning (ATAL) Academy Online FDP on "Recent Trends and Applications in Biomedical Signal and Image Processing" from 21.09.2020 to 25.09.2020 organized by G. H. Raisoni College of Engineering, Nagpur.

17. Mr.V.Rajesh , Mr. Gowshameed .S and Mr.Franklin .J attended an AICTE Training And Learning (ATAL) Academy Online FDP on "Artificial Intelligence and Machine Learning Applications in Biomedical Engineering" from 21/09/2020 to 25/09 2020 at university BDT College of Engineering.

18. Dr.D.Saraswathi attended an AICTE Training and Learning (ATAL) Academy Online FDP on Recent Trends in Data Science and its Tools for Researchers conducted by IFET College of Engineering, Villupuram from 28.09.2020 to 02.10.2020.

19. Mr.E.Ramassamy attended an AICTE Training And Learning (ATAL) Academy Online FDP on "Photonics" from 28.09.2020 to 02.10.2020 organized by C.V.Raman Global University.

20. Mr.E.Ramassamy attended One Week Hands – on FDP on "Artificial Intelligence using Python" organized by the department of CSE, Manakula Vinayagar Institute of Technology from 14.09.2020 to 19.09.2020.

STUDENTS ACTIVITIES

1. V.Kumar and E.Dinesh of 2020 passed out batch, presented a paper titled "Deep Learning based Intelligent Email Autoresponder" in AICTE sponsored National E-Conference on "Recent Advances in Smart System Automation, Computing and Communication" organized by IFET College of Engineering during 28th and 29th August 2020.

PROGRAM ORGNIZED

1. 3rd International IEEE Conference ICSCAN 2020 was conducted on 3rd and 4th July 2020.

2. A guest lecture on Artificial Neural Networks was conducted on 26th September 2020. The resource person was Dr.M.Balaji, Associate Professor, SSN College of Engineering, Chennai and the arrangements were made by Ms.R.Sofia.

3. A guest lecture on "Industry 4.0" was conducted on 28th September 2020. The resource person was Col.K.S.Chakravarthi, Former IETE Chairman, Chennai Center. The programme was coordinated by Dr. S. Padmapriya.
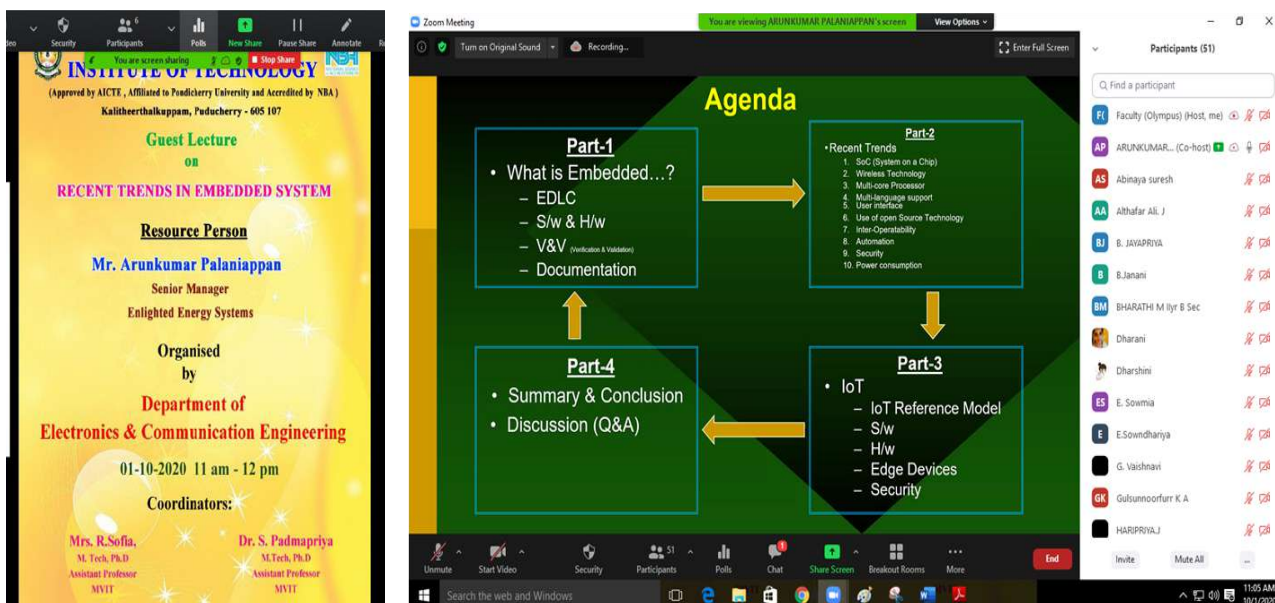
PROGRAM ORGNIZED

4. A guest lecture on "Aspiring a Career in VLSI Industry" was conducted on 30th September 2020. The resource person was Ms.M.Asha, Senior Design Engineer, Altran Technologies India Pvt. Ltd., Bangalore. The programme was coordinated by Dr. B.Lakshmi Priya.

5. A guest lecture on "Recent Trends in Embedded Systems" was conducted on 1st October 2020. The resource person was MR. P.L. Arunkumar, Senior Manager Hardware Engineering Chennai, Enlighted Inc.,-Siemens Company and the arrangements were made by Mrs.R.Sofia and Dr. S. Padmapriya.

PROGRAM ORGNIZED

6. Dr.B.Lakshmi priya, Dr.D.Saraswathi, Dr.S.Vinoth, Dr.R.Sofia, Mr.K.Kumaran and Mr.M.Sivaraj submitted 19papers out of which, 10 papers have been published in various SCI indexed and Scopus Indexed journals.

7. Dr.S.Vinoth has published one patent. Dr.S.Arunmozhi has published one patent. One Patent was   granted in the name of Mr. V.Rajesh and K.Kumaran of ECE department.