

MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

Kalitheerthal kuppam, Madgadipet 605107

NEWSLETTER 2015-16



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 focusing to develop the skills of modern youth in the field of Electronics and Communication Engineering. Adequate emphasis is given to electronic design using modern teaching methodologies. Emphasis is also given to the development of soft and hard skills. Ulmost care is taken in the perspective of imparting more practical knowledge to the student's community in the field of Electronics and Communication.



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 issues.

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.

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.

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.

STAFF ACTIVITIES

Mr.K.Sambath Kumar, Mr.S.Anbazhagan, Mr.E.Ramasamy, Mr.V.Rajesh, Ms.B.Lakshmi Priya and Ms.P.Malarvizhi have attended a three day Faculty Development Programme on "E – Literacy Level II (Advanced Teaching Techniques)" conducted by ICT Training Academy, Puducherry from 10th to 12th June 2015.

Ms.B.Lakshmi Priya and Ms.P.Malarvizhi have attended a two day workshop on "Digital Image Processing using MATLAB" at Madras Institute of Technology, Chennai on 20^{th} and 21^{st} June 2015.

Ms.B.Lakshmi Priya has attended a DBT sponsored seminar on "Fusion Techniques for Improved Analysis, Detection and Diagnosis of Abnormalities in Bio – Medical Images" at Kongu Engineering College on 26.06.2015.

Ms.B.Lakshmi Priya and Ms.P.Malarvizhi have completed an online course on "Introduction to Biomedical Imaging" conducted by The University of Queensland, Australia through edX.

Ms.P.Malarvizhi have completed an online course on "Fundamentals of Nanoelectronics: Basic Concepts" conducted by Purdue University through edX.

Ms.B.Lakshmi Priya has published a paper on "ICI Cancellation Using Adaptive Modulation in Coded OFDM System" in IJSEAS.

Mr.V.Rajesh has published a paper on "BSPLine Interpolation Filter Approach for Reduction of Heavily Corrupted Salt and Pepper Noise in Images" in CIIT Journal, Coimbatore.

Mr.J.Ajayan, Mr.K.Vivek, Mr.V.Rajesh presented a paper on "A Study of Performance Comparison of Digital Multipliers Using 22nm Strained Silicon Technology" at Karpagam Engineering College(ICECS)& Published in IEEE explorer June 2015

Mr.J.Ajayan, Mr.K.Vivek, Mr.V.Rajesh presented a paper on A High Speed 256-Bit Carry Look Ahead Adder Design Using 22nm Strained Silicon Technology at Karpagam Engineering College(ICECS)& Published in IEEE explorer June 2015.

Mrs.D.Saraswathy attended a one day workshop on "Recent Advances in Medical Imaging Techniques" on 31st July 2015, organized by Anna University, Chennai.

Mrs.B.Lakshmi Priya has attended a two day workshop on "Hands-on Training on Image Fusion Techniques using MATLAB and Open Source Tools for Beginners and Researchers" at Kongu Engineering College on 28.08.15 and 29.08.15.

Mrs.K.Priethamjivithya has attended one day workshop on "LTE Multi Antenna techniques using MATLAB "on 5th September 2015 at VIT, Vellore.

Students activities

13 students from III ECE B have attended a workshop on "Embedded System" at Accel IT Academy on 24.6.15.

Twelve of our students from III ECE B have attended Inplant Training at HCL, Chennai from 29.6.15 to 1.7.15.

Four of our students from III ECE B have attended Inplant Training at Semi technology from 15.7.2015 to 19.07.2015.

Industrial visit to Purple Technologies, Coimbatore and Beta Technologies, Coimbatore was arranged for IV ECE students on 15th and 16th July 2015.

Industrial visit to BSNL, Chennai was arranged for II ECE students on 25th July 2015.

Industrial visit to ISRO Trivandrum and Keltron, Cochin was arranged for III ECE students on $31^{\rm st}$ July and $1^{\rm st}$ August 2015.

S.Clement Joshua, B.Thomas, J.Arun, P.Kathiravan, V.Gokularaman, Harikumar, K. Surender of III ECE A students have won Rs.3500/- cash prize in "SUMO WAR" Conducted at Vellammal Engineering college, Ambatthur on 8th August 2015.

Archana and Gayathiri of III ECE A students have won Rs.750/- cash prize in Quiz conducted at IFET Engineering College, on 5th September 2015.

S.Clement Joshua, J.Arun, V.Gokularaman of III ECE A students have won Rs.35000/cash prize in "ROBO WAR" Conducted at SRM University, Chennai on 12th and 13th September 2015.

PROGRAM ORGANIZED

Guest of the week programme on "TOWN PLANNING" was arranged for all III year students on 10^{th} July 2015. The guest was Mr.Ramkumar, Town Planner.

A guest lecture on "ETHICAL HACKING AND PENETRATION TESTING" was conducted for final ECE students on 24th July 2015. The resource person was Mr.S.Selvakumar, Security Specialist, AXA Technologies, Bangalore.



The resource person Mr.S.Selvakumar delivered the lecture for IV ECE students

A workshop on "ANDROID" was organized for III ECE students on 24^{th} & 25^{th} july 2015.



Workshop on "ANDROID"

A Workshop on "BASIC ELECTRONICS" was organized for II year students on $20^{\rm th}$ July 2015.





III ECE students organized "BASIC ELECTRONICS" workshop

Softskill training program was given for III ECE students by SEED Chennai from 14^{th} to 17^{th} July 2015.

A training program "BUSINESS ENGLISH CERTIFICATE" was given for II year students from 14^{th} to 17^{th} July 2015.

Motivation class for IV ECE students was conducted by Mr.Moosi Pugazhendhi on 20^{th} july 2015.

A IETE sponsored workshop on "LTSPICE " was organized for II year students on 8^{th} August 2015.



Workshop on "LTSPICE" conducted by Mr.Ajayan and Mr.Vivek

A workshop on "Hands-on Training Programme On Image Processing using MATLAB" was organized for B.tech and M.tech students on 3rd & 4th August 2015.



Workshop on "Hands-on Training Programme On Image Processing using MATLAB"

FOSS training was conducted for III ECE students on 8th August 2015.

A guest lecture on "Electromagnetics" was conducted for second year ECE students on 22^{nd} August 2015. The resource person was Dr.Gunasekaran, Dean, Rajalakshmi Engineering College, Chennai.



Dr.Gunasekaran delivered lecture for II ECE A & B

A Workshop on "ARDINO" was organized for III year students on $20^{th}\,$ and $21^{st}\,$ August 2015.

One day workshop on "Eagle PCB design" was conducted for II year ECE A and B section students on 18.08.15 and 19.08.15 respectively.

A guest lecture on "Cancer Awareness" was organized for the second and third year ECE students on 7^{th} September. The resource person was Dr. Thulasimani, Retd. Surgeon and Trust member of Pondicherry Cancer Institute.





A guest lecture on "Cancer Awareness"