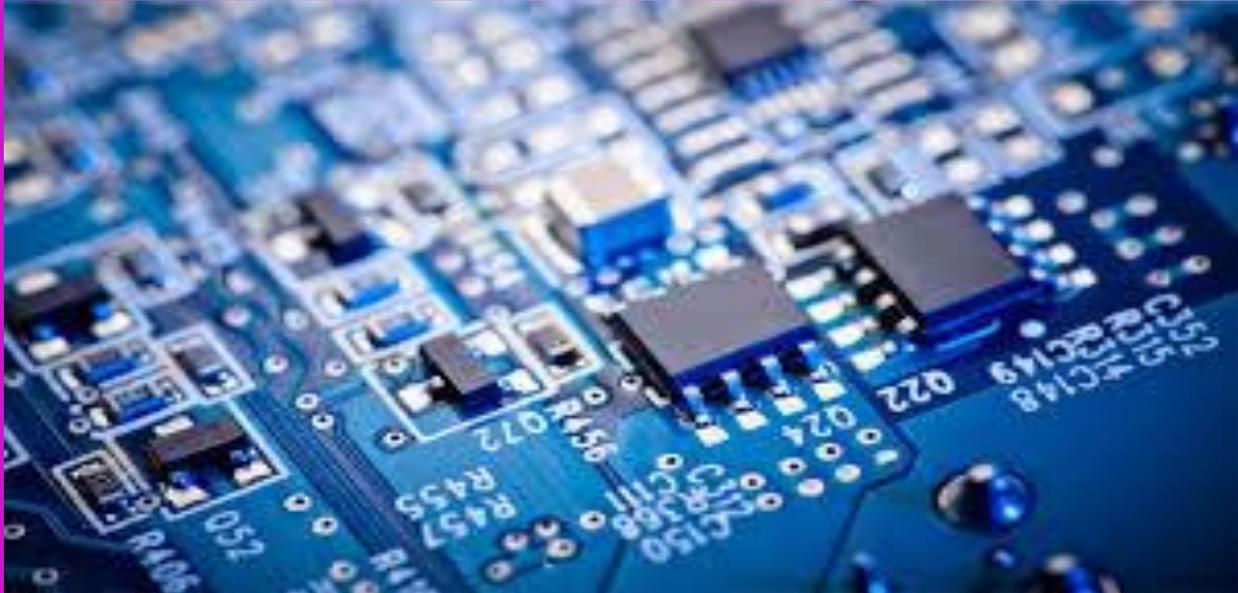# MAILAM ENGINEERING COLLEGE

Department of Electronics and Communication Engineering

Annual Magazine of ECE

Volume - 5 (2016-2017)

NICSCOM

- **Articles and Reports**
- **Research Breakthroughs**
- **Achievements**
- **Activities**

Department of
**ELECTRONICS &
COMMUNICATION
ENGINEERING**

Vision and Mission of the Institution

Vision

To bring forth prosperity through modern technology by means of imparting value based education, innovation and become a world class technical institution.

Mission

M1.   To provide necessary technical skills through excellent standards of quality education, keeping pace with ever changing technologies.

M2.   To bring students together to be trained in leadership skills , engage in activities that promote ethical manners, exhibit social liabilities and inspire a dedication to excellence.

M3.   To develop the spirit of entrepreneurship among the students through Entrepreneurial Awareness Campaign, training and Research and Development etc.

Vision and Mission of the Department

Vision

To bring forth prosperity through modern electronic and communication Technology by imparting value-based education, innovation and become a world-class technical department.

Mission

M1-   **Technical Education and research**: To impart technical education to face the challenges of the modern technology and research.

M2-   **Leadership quality**: To provide research exposure through industry institute interactions.

M3-   **Entrepreneurship**: To inculcate the spirit of innovation and creativity among students to become entrepreneur.

Program Educational Objectives (PEOs)

PE0 1:   EMPLOYABILITY: To innovate the students to take more than just imagination and to give superior technical education for tomorrow's competitive world.

PEO 2:   HIGHER STUDIES: To prepare the students with high standard education to associate with global industry needed.

PEO3:   ENTREPRENEURSHIP AND LEADERSHIP: To train the student with perfection and state-of-the art technology keeping in the changing and demanding trends.

PEO 4:   PROFESSIONAL ETHICS: To create innovative thinkers in electronics and communication to create new projects to meet the needs of the society.

PROGRAMME OUTCOMES (PO)

PO1: Engineering knowledge: Apply knowledge of mathematics, science, engineering fundamentals, and Electronics and communication engineering to the solution of engineering problems.

PO2 : **Problem analysis:** Identify, formulate, review literature and analyze Electronics and communication engineering problems to design, conduct experiments, analyze data and interpret data.

PO3 : **Design /development of solutions: Design** solution for Electronics and communication
engineering problems and design system component of processes that meet the desired needs with appropriate consideration for the public health and safety, and the cultural, societal and the 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 in Electronics and communication
engineering.

PO5 : **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to Electronics and communication 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 Electronics and communication engineering practice.

PO7: **Environment and sustainability:** Understand the impact of the Electronics and communication engineering solutions in societal and environmental contexts, and demonstrate the knowledge and need for sustainable development.

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

PO9 : **Individual and team work:** Function affectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings in Electronics and communication
engineering.

PO10: Communication: Communicate effectively on complex engineering activities with the engineering committee and with society at large, such as, being able to comprehend and write affective reports and design documentation, make effective presentations in Electronics and communication engineering.

PO11: Project Management and finance: Demonstrate knowledge & understanding of the electronics and communication engineering principles 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 in Electronics and communication engineering.

PO12: **Life- long learning:** Recognize the need for, and the preparation and ability to engage in
independent research and lifelong learning in the broadest contest of technological changes in Electronics and communication engineering.

Shri. **M. DHANASEKARAN**
Chairman and Managing Director

College (MEC) was established in the year 1998 with the aim to impart quality education to the young minds. Technological progress in the last few decades has helped to purge national barriers and create a global marketplace. Our objective is to develop confidence, self-motivation, research and problem-solving skill sets and imbibe value education among our students. We give top priority to discipline and knowledge and the application of the same for societal progress and upliftment.

Our College aims at becoming a front runner in developing the next generation teaching and learning methods and to foster individual excellence and participation of our students in the full range of academic, spiritual, cultural, social and physical activities, and make them socially sensible all-rounders.

I also understand the need for the students to feel at home in the college environment. Both the teaching fraternity and the management team are amiable and affectionate, yet they make the students as disciplined individuals such that success is always on their side. All amenities like Computer Labs with internet facility, library and laboratories, hostels, transports, etc. function in full swing to make the students perform well. Added to this, to encourage sports and extra-curricular activities among the students, we are offering various facilities. MEC is accredited by the well-known corporate giant, TATA Consultancy Services (TCS), so that the students find an easy way to kick-start their career with a big brand like the TCS. In addition to this, our placement cell is doing an excellent job in training the students to get placed in different sectors. Placement is our utmost priority now.

Shri. **S.V. SUGUMARAN, M.L.A.**
Vice Chairman

Mailam Engineering College was established to impart academic excellence by providing a conducive environment for the overall personality development of young ones. Spanning over a decade, the college is covering many a milestone year after year incorporating all modern mechanisms of technological research and application. Within this span of time, it has emerged as one of the leading Engineering Colleges in the Villupuram District. Mailam Engineering College is making every effort to nurture young Engineers with global mindset embedded in Indian roots.

We have a perfect blend of academics and dynamic environment to motivate everyone – the management, faculty and students to deliver their best. We have a very competent and dedicated core faculty team. In addition to their excellent teaching, the faculty members are actively involved in molding the minds of the young engineers.

We encourage students to utilize our high standard of teaching-learning services. Our objective is to create a class of qualified, innovative and dynamic professionals for the Engineering sector, for self-employment and for academic & research institutions of socio-economic importance.

Secretary's Message

Dr.. **Narayanasamy Kesavan,**

Secretary

I welcome you all to MEC, A Place to Foster Innovative Technologists Since its inception in 1998, MEC has achieved many a remarkable milestone such as Extraordinary Academic Excellence, Outstanding Placement Record, and Stunning Accomplishments in Sports and Co-curricular activities facilitating a holistic learning environment for its students. Learning is both a fulfilled activity and a rewarding experience at MEC. With a wide range of well-qualified and highly experienced team of faculty, our strength lies in transforming average minds into extraordinary engineers with such skills and potential that meets the current industry standards and expectations. Student Chapters and Profession Bodies such as ISA, IEEE, CSI, ISTE, IEI, CII, NSS, IWS etc. have also been formed to encourage the students to interact with the outside technical fraternity to keep them updated about the ongoing technical innovations. As the Secretary of MEC, I welcome you all once again to explore the world of unlimited opportunities and possibilities at MEC.

Dr. S. SENTHIL
Principal

I am deeply delighted to divulge the dictum, "Students don't care how much we have and know; but all they have to know is how much we care! – for their future goals and aspirations". It is with this faith and firm affirmation that Mailam Engineering College shapes students into smart, successful and challenging professionals in Engineering and Technology, with a clear conviction that service to humanity, especially to the students' community, is service to the creator.

Our students grow by leaps and bounds and so does our institution, because we are sure that the success of our students is the impetus of the institution. Integrating character and creativity, blended with a compelling compassion and commitment towards societal progress, in pupils' personality has been the trump card for our triumph over a decade now. We augment academics with industry-institute interface wherein our students remain ahead and abreast of industrial applications pertaining to their domain.

We leave no stone unturned in incorporating physical and psychological pragmatism with a full time practicing psychologist within the campus with a sound NO TO STRESS secret. With our sporting stars shining at zonal, nation and international levels coupled with a promising placement record ticking over the three-digit figure every year, we are proud to proclaim that at Mailam Engineering College Professionalism is Personified and we streamline success by sheer design and not by coincidence.

Dr. S. Ganesan, Prof. & Head
ECE

The objectives for the establishment of the Department are in line with the vision of MEC to become an exemplary institute of nationally acknowledged stature and excellence in teaching, research and scholarship. Furthermore, our academic program and learning environment have been designed to contribute to the quality and intellectual development of the students. We are actively engaged in an exciting and forward-looking program of teaching and research.

The Department of Electronics and Communication Engineering was first started in 1998 with aims to provide our state and our nation, quality graduates whom will contribute to the development of the country in meeting the Vision of MEC. To achieve the vision and goals of the department, it is necessary that all concerned would need to work together and invest in mental and physical energies to uphold the name of the department. The intake of students and number of faculty members in the Department has been steadily increasing. The faculty members are not only providing high quality education to the students, but also are immersed in cutting-edge research which covers almost all disciplinary areas of Electronics and Communication Engineering.

I hope that the information on these pages reflect this vision and will motivate you to learn more about us with a view to participating in our programs – either as a student, a member of staff, or industry collaborator or sponsor. If you have an opportunity to visit us in person, you are assured of a warm welcome. If you have any comments or suggestions, please email us to hodece@mec.ac.in. We appreciate your interest and your input.

The Valediction of Students Association of Electronics and Communication Engineering (SAECE) for the Academic year 2016-2017 was held on 4th March 2017 and a presentation on "Latest Trends in Electronics" was organized by the association on the same day.

Mr. Rajendran, Managing Director of Kaavian Systems, was the chief Guest and delivered the Keynote address.

FACULTY CONTRIBUTION

Journals with ISSN and Conference Publications (2016-2017)

S.No	Author	Title/Topic	Name of the Journal & ISSN Number	International / National Journal	Year of Publication
1		Effective Detection of Image Forgeries on Different Resolution Images using Illuminant Map	National Conference on Emerging technologies	National	2016-2017
2		Aging Face Recognition Using SIFT Features and Age Estimation using Edge Detection	National Conference on Emerging technologies	National	2016-2017
3	Dr.S.Ganesan	Stenography and Crypto biometric System Model using DBE Scheme	National Conference on Emerging technologies	National	2016-2017
4		High Performance FIR filter Design using Ancient Indian Vedic Mathematics	International Journal of Advanced research in Basic Engineering Sciences and Technology ISSN 2395-965X	International	2016-2017
5		High Performance Design of Elgamal Cryptographic Algorithm using Vedic Mathematics	Indian Journal of Science and Technology ISSN 0974- 5645	International	2016-2017
1		Automated Fair Collection System for Passengers in Vehicles using Barcode ticket and RFID reader	International Conference on Emerging innovation in Engineering and Technology ISSN 2456-1983	International	2016 –2017
2	Dr.K.Jeyakumar	Satellite remote sensing image based aircraft recognition & detect Fuzzy Clustering	International Conference on Recent trends in Electronics, Communication And Computation Technologies	International	2016-2017
1	Dr.V.Gajendra Kumar	Face Recognition System by Image Processing	International Conference on Recent trends in Electronics, Communication And Computation Technologies	International	2016 –2017

2		Evaluations of programming complexity in APP Inventor	International Conference on Recent trends in Electronics, Communication And Computation Technologies	International	2016-2017
1	Mrs.J.Suganya	Enhancing the efficiency of voice controlled wheel chairs using NAM for recognizing partial speech in Tamil	Circuits and systems ISSN 2884 - 2892	International	2016-2017
1		Automated Fair collection system for passengers in Vehicles using Barcode ticket and RFID reader	International Conference on Emerging innovation in Engineering and Technology ISSN 2456-1983	International	2016 – 2017
2		Multi service Handoff Mechanism with QOS Support in Mobile Cloud Computing Environment	International Conference on Emerging Innovation in Engineering and Technology ISSN 2456-1983	International	2016– 2017
3	Mr.C.V.Venkatasamy	Sharing of Tactical Information between UGV's using VANET in Military Battle field.	International Conference on Emerging Innovation in Engineering and Technology ISSN 2456-1983	International	2016-2017
4		Guarantee Energy Saving and Interference Minimization in MIMO WSN'S using Opportunistic and E-span Algorithm	International Conference on Instrumentation, Electrical and Electronics Engineering	International	2016 – 2017
1		An Efficient Method for Snow Monitoring and Peak Identification	International conference on Futuristic Trends in Electronics Engineering	International	2016 -2017
2	Mrs.C.Mohanadevi	A Robust and Efficient Color Image Water Marking using Quantum Particle Swarm Optimization Algorithm	International conference on Futuristic Trends in Electronics Engineering	International	2016 – 2017
1	Mrs.B.Ramathilagam	Faster Encryption and Decryption Scheme for Visual Cryptography	International Conference on Emerging Innovation in Engineering and Technology	International	2016 – 2017

1		using Error Diffusion and Segmentation	ISSN 2456-1983		
2		Rethinking Mobile Data Offloading to Combine Wi-Fi and Small Cell in Unlicensed Spectrum	International Conference on Emerging Innovation in Engineering and Technology ISSN 2456-1983	International	2016– 2017
1	Mrs.K.Kavitha	Optimal Performance of Key Predistribution Protocol in Wireless Sensor Network	International Conference on Emerging innovation in Engineering & Technology	International	2016 – 2017
1	Ms.C.Jenitha	Implementation of Magnetic Induction in underground Communication	ICIEEE	International	2016 – 2017
1	Ms.C.Vanithasri	Implementation of Magnetic Induction in Underground Communication	ICIEEE	International	2016 – 2017
1	Mr.S.Ramesh	A Context Aware handoff scheme and All IP Mobile Multicast Service for WIMAX Networks	National Conference on Computing and communication Technologies	National	2016 – 2017
1	Mrs.S.Subhashini	A Robust and Efficient Color Image Water Marking using Quantum Particle Swarm Optimization Algorithm	International Conference on Futuristic Trends in Electronics Engineering	International	2016 – 2017
1	Mr.M.Rajaparthiban	LIFI based Guarded Phonic Conveyance in terms of Dossier	International journal of Multi Disciplinary Research	International	2016 – 2017
2		Garbage Aqua cure Practice Oversee Adopting GSM	International journal of Scientific Engineering and Applied Science ISSN 2395-3470	International	2016 – 2017
1	Mrs.N.Nishavithri	Modern vehicle for the Physically Challenged People using Blue Eye Technology	International Journal of Mechanical Engineering and Technology ISSN 0976-6359	International	2016 – 2017
2		Integrated 0.4 KV bus monitoring and Drives Control of Fuel Oil Pump House MCC in	Middle- East Journal of Scientific Research ISSN 1990-9233	International	2016 – 2017

		Thermal Power Station in NLC			
3		Automated Bus Monitoring and Drive Control System in Thermal Power Station II	International Conference on Science Technology Engineering and Management	International	2016 - 2017
4		IoT based Waste Collection System using Infrared Sensors	National conference on smart and digital electronic systems	National	2016 – 2017
5		Optimal Precision allocation through PA algorithm in Wireless Sensor Network applications	International Journal of Engineering Research ISSN 2321-7758	International	2016 – 2017
1	Mr.K.Balaji	Wireless underwater sensor networks state of the art and future directions	International conference on WISPNET	International	2016 – 2017
1	Mr.K.Dhanasekaran	Wireless underwater sensor networks state of the art and future directions	International conference on WISPNET	International	2016 – 2017
1	Mr.R.prasanna	Wireless underwater sensor networks state of the art and future directions	International conference on WISPNET	International	2016 – 2017
1	Mr.K.Vinoth	Design of low power LFSR with and without clock gating in different BIST modes	International conference on Intelligent Systems and Control	International	2016 – 2017
1	Mrs.K.Anparasi	Design of low power LFSR with and without clock gating in different BIST modes	International conference on Intelligent Systems and Control	International	2016 – 2017

FDP/Seminar /workshop attended by faculty [2016-2017]

Name of the faculty & Designation	Name of the program attended	Organized by	Dates	No. of days
Mrs.C.Mohanadevi, ASP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Mrs.J.Suganya, ASP	National level seminar on Intellectual property rights 2016	VRS college of Engg & Tech, Arasur	11.11.2016& 12.11.2016	2
Mrs.S.Maheswari, ASP	National level seminar on Intellectual property rights 2016	VRS college of Engg & Tech, Arasur	11.11.2016& 12.11.2016	2
Mrs.K.Kavitha, ASP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Mr.C.V.Venkatasamy ,ASP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Ms. C. Jenitha, ASP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Mr. S.Ramesh , ASP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Mrs.B.Ramathilagam ,ASP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Ms.C.Vanithasri, ASP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Mrs.S.Subhashini, ASP	National level seminar on Intellectual property rights 2016	VRS college of Engg & Tech, Arasur	11.11.2016& 12.11.2016	2
Mrs.J.Jothi, AP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Ms. D. Lakshmi, AP	TEQIP sponsored FDP on Wireless sensor network - Issues & challenges	Pondicherry Engineering college, Puducherry	21.11.2016-26.11.2016	6
Mr.M.Rajaparthiban, AP	National level seminar on Intellectual property rights 2016	VRS college of Engg & Tech, Arasur	11.11.2016& 12.11.2016	2
Mr.G.Sathish kumar, AP	TEQIP sponsored FDP on Wireless sensor network - Issues & challenges	Pondicherry Engineering college, Puducherry	21.11.2016-26.11.2016	6
Mrs. N.Nishavithri, AP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Ms. R.Nithya, AP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Mr. K.Dhanasekaran, AP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Mr.L.Prakash, AP	TEQIP sponsored FDP on Wireless sensor network - Issues & challenges	Pondicherry Engineering college, Puducherry	21.11.2016-26.11.2016	6
Mr.R.Prasanna, AP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Mr.K.Balaji, AP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6

Mrs.P.Srividdhya, AP	Modern Electronics Laboratory theory Practice& Maintanance	Krishnasamy Engg college &Tech, Cuddalore	18.5.2017	1
	National seminar on Emerging trends in mobile communication	Kamban Engineering college, Thiruvannamalai	27.3.2017	1
Ms.P.Kaviselvi, AP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Mr.M.Mohamed aurang, AP	TEQIP sponsored FDP on Wireless sensor network - Issues & challenges	Pondicherry Engineering college, Puducherry	21.11.2016-26.11.2016	6
Mr.R.Alaguvel, AP	Modern Electronics Laboratory theory Practice& Maintanance	Krishnasamy Engg college &Tech, Cuddalore	18.5.2017	1
	National seminar on Emerging trends in mobile communication	Kamban Engineering college, Thiruvannamalai	27.3.2017	1
Mrs.V.Karthika, AP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Mrs.K.Anparasi, AP	National level seminar on Intellectual property rights 2016	VRS college of Engg & Tech, Arasur	11.11.2016& 12.11.2016	2
Mr.K.Vinoth.K, AP	National level seminar on Intellectual property rights 2016	VRS college of Engg & Tech, Arasur	11.11.2016& 12.11.2016	2
Mr. S. Karthikeyan, AP	TEQIP sponsored FDP on Wireless sensor network - Issues & challenges	Pondicherry Engineering college, Puducherry	21.11.2016-26.11.2016	6
Ms.P.Malarvizhi, AP	Modern Electronics Laboratory theory Practice & Maintanance	Krishnasamy Engg college &Tech, Cuddalore	18.5.2017	1
	National seminar on Emerging trends in mobile communication	Kamban Engineering college, Thiruvannamalai	27.3.2017	1
Ms.G.Gajalakshmi, AP	TEQIP sponsored FDP on Wireless sensor network - Issues & challenges	Pondicherry Engineering college, Puducherry	21.11.2016-26.11.2016	6
Ms.J.Ezhilmani, AP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6
Ms.R.Varalakshmi, AP	Modern Electronics Laboratory theory Practice & Maintanance	Krishnasamy Engg college &Tech, Cuddalore	18.5.2017	1
	National seminar on Emerging trends in mobile communication	Kamban Engineering college, Thiruvannamalai	27.3.2017	1
Mrs.R.Madhumathi, AP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6

Mr.B.Jayakumar, AP	STTP on various coding techniques	Mailam Engineering college,Mailam	21.11.2016-26.11.2016	6

Students Activities

- Selvan.K.Vijaya Shankar and Selvan. S.Boopathy of III Yr have won II prize in Project Expo in the National Level Technical Symposium, **"SAELCO"** organized by University College of Engineering, Ariyalur, on 8 Sep 2016.

- Selvan.K.Vijaya Shankar and Selvan S.Boopathy of III Yr won II prize in Project Expo in the National Level Technical Symposium, **"TECHFINIX'16**" organized by Paavai Engineering College, Nammakal, on 29 - 30 Sep 2016.

- Selvan.K.Dhilipan, and Selvan.N.Arunkumar, of III Yr have won II prize in the event "**Robo War"** in the National Level Technical Symposium, **"TECHSAT'17**" organized by Selvam College of Technology, Nammakal, on 2nd Feb 2017.

- Selvan.S.Mohamed Mubarak, Selvan.D.Ragupathi and Selvan D.Manibharathi of III Yr have won I prize in the **Project Display** in the National Level Technical Symposium, **"SPANGLES'17**" organized by Eswari Engineering College, Chennai, on 8 Feb 2017.

- Selvan.S.Mohamed Mubarak, Selvan.D.Ragupathi and Selvan D.Manibharathi of III Yr have won II prize in the **Technical Quiz Competition** in the National Level Technical Symposium, **"Inspiro Ecclesia'17"** organized by St.Peter's College of Engineering, Chennai, on 8 Feb 2017 and in the same Symposium Selvi.S.Lakshmi Bai and Selvi.K.Kavi of II Yr. have won III prize in Paper Presentation.

- Selvan.K.Vijaya Shankar and Selvan S.Boopathy of III Yr have won I prize and Selvi.M.Sasirekha of IV Yr has won III prize in **Mega Project Expo** in the National Level Technical Symposium, **"SVEET' 17"** organized by Sri Venkateshwara College of Engineering & Technology, Ariyalur, on 9 - 11 Feb 2017.

- S.Susithra and B.Vedhavalli of III Yr have won II prize in "**Code Debugging in C"** and Selvi.R.Aruna and Selvi.U.Gayathri of II Yr have won II prize in "**Circuit Debugging"** in the National Level Technical Festival, **"MITILENCE 2017"** organized by Manakula Vinayagar Institute of Technology, Puducherry, on 10 - 11 Feb 2017.

- Selvi.M.Harini and Selvi.B.Jayasri of IV Yr presented a paper entitled **"Ventilating System For Amitotic People"** and won I prize in the National Level

Technical Symposium, **"FUERZA '17"** organized by Panimalar Engineering College, Chennai, on 11 Feb 2017 and in the same event Selvan.S.Mohamed Mubarak, Selvan.D.Ragupathi and Selvan D.Manibharathi of III Yr have won I prize in **"Project Display "**

- On 23 Feb 2017, a National Level Technical Symposium, **"CAFACE"** was organized by K.S. Rangasamy College of Engineering, Tiruchengode. Selvan.K.Anand Sivakumar, Selvan.R.Chandru, Selvan.R.Hariharan and Selvan A.Arunpandiyan of Final Year presented a paper titled "**Smart Ticketing and Multifunction Railway Crossing System**" and got II prize.

- Selvan.K.Dhilipan of III Yr. has got the **Best Paper Award** in the National Level Technical Symposium, "**TECHKRANTHI'2K17"** organized by Panaimalar Institute of Technology, Chennai, on 25 Feb 2017.

- Selvi.K.Suganya and E.Suganthi of IV Yr won I prize for their paper titled "**Ventilating System For Amitotic People"** in the National Level Technical Symposium, **"PEPIEC"** organized by Annai Teresa College of Engineering, Villupuram, on 25 Feb 2017.

- Selvan.K.Dhilipan, Selvan.N.Arunkumar, and Selvan K.Arumugam of III Yr. have won I prize in the **Project Expo** in the National Level Technical Symposium, **"RACKET 2017"** organized by R.M.K College of Engineering and Technology, Puduvoyal, on 27 Feb 2017.

- Selvan.K.Dhilipan, Selvan.N.Arunkumar, Selvan.I.Ajithkumar and Selvan K.Arumugam of III Yr have won II prize in the **Project Expo** in the National Science Day Celebration, **"SCIMIT'17**" organized by Manakular Vinayagar Institute of Technology, Puducherry, on 28 Feb 2017.

Prize Winner in the Academic Year 2016-2017(Outside the State)

S.No	Name of the Student	Year / Sec	Name of the event	Date of the event	Name of the organizing Institution	Position / prize, if any received
1	K.Dhilipan	III/A	Technical Quiz	16.03.17	Shri Krishna College of Engg and Technology, Pondicherry	I Prize
2	K.Dhilipan N.Arunkumar I.Ajithkumar K.Arumugam	III/A	Project Expo	02.02.17	Manakula Vinayagar Institute of Technology, Pondicherry	II Prize
3	S.Susithra B.Vedhavalli	II/C	Code debugging	10.02.17 & 11.02.17	Manakula Vinayagar Institute of Technology, Pondicherry	II Prize
4	R.Aruna U.Gayathri	II/A	Circuit Debugging	10.02.17 & 11.02.17	Manakula Vinayagar Institute of Technology, Pondicherry	II Prize
5	K.Dhilipan N.Arunkumar	III/A	Non-Technical Event	16.03.17	Sri Krishna College of Engineering, Pondicherry	I Prize
6	R.Aruna U.Gayathri	II/A	Project Expo	02.02.17	Manakula Vinayagar Institute of Technology, Pondicherry	I Prize
7	B.Sathish	II/C	Project XPO	28.02.17	Manakula Vinayagar Institute of Technology, Pondicherry	1st Prize

Participation in the Academic Year 2016-2017(Within the State)

S.No	Name of the Student	Year /Sec	Name of the event	Date of the event	Name of the organizing Institution	Position /prize, if any received
1	K.Kavi S.Lakshmi Bai	II/B	Inspiro Ecclesia'17 A Natoinal Level Technical Symposium (Quiz)	08.02.2017	St.Peter's College of Engineering and Technology	3rd prize
2	S.Soundarya	II/C	7'th Natoinal Level Technical Symposium AGNIMITHRA (Cryptic Mindquiest)	09.03.2017 & 10.03.2017	University College of Engineering, Villupuram	I Prize
3	K.Vijaya Shankar S.Boopathy	III/B	Project Expo	08.09.16	University College of Engineering, Ariyalur	II prize
4	K.Vijaya Shankar S.Boopathy	III/B	Project Expo	29.09.16 & 30.09.16	Paavai Engineering College,Namakkal	II prize
5	K.Dhilipan N.Arunkumar I.Ajithkumar	III/A	Project Expo	02.02.17	Selvam College of Engineering, Namakkal	I Prize

	K.Arumugam					
6	K.Dhilipan N.Arunkumar.	III/A	Robo War event	02.02.17	Selvam College of Engineering, Namakkal	II prize
7	K.Dhilipan N.Arunkumar K.Arumugam	III/A	Project Expo	25.02.17	Panimalar Institute of Technology, Chennai	I Prize
8	K.Dhilipan N.Arunkumar K.Arumugam	III/A	Project Expo	27.02.17	R.M.K College of Engineering and Technology, Chennai	I Prize
9	S.Mohamed Mubarak D.Ragupathi D.Manibharathi	III/B	Project Display	08.02.17	Eswari Engineering College, Chennai	I Prize
10	S.Mohamed Mubarak D.Ragupathi D.Manibharathi	III/B	Project Display	11.02.17	Panimalar Institute of Technology, Chennai	I Prize
11	K.Vijaya Shankar S.Boopathy	III/B	Mega Project Display	09.02.17 10.02.17 & 11.02.17	Srivenkateswara College of Engineering and Technology,Ariyalur	I Prize
12	M.Sasirekha	IV/C	Mega Project Display	09.02.17 10.02.17 & 11.02.17	Srivenkateswara College of Engineering and Technology, Ariyalur	3rd prize
13	K.Vijaya Shankar S.Boopathy	III/B	Project Expo	08.04.17	Sri Sairam Engineering College, Chennai	3rd prize
14	K.Dhilipan	III/A	Technical Quiz	16.03.17	Sri Krishna College of Engineering, Pondicherry	I Prize
15	S.Mohamed Mubarak D.Ragupathi D.Manibharathi	III/B	Technical Quiz	08.02.17	St.Peter's College of Engineering,Chennai	II Prize
16	M.Sasirekha	II/C	Mega Project Expo	09.02.2017 to 11.02.2017	Sri Venkateswara College of Engineering and Technology, Pondicherry	3rd prize

R & D Activities

M. Sasirekha of IV Year ECE has done a Project on "**VOICE WHOOP ADMONITION TO DODGE CONTRETEMPS IN POWET DISSEMINATION"** and win 1st prize in Sri Venkateswara College of Engineering and Technology.

S. Meena and S. Pushpa of IV Year ECE has developed a "**GUIDING MODULE FOR AUTISTIC"** and win 1st prize and received CM Award at the district level.

HUMANOID ROBOTS

A Humanoid may be defined as something that resembles or looks like a human and having characteristics like opposable thumb, ability to walk in upright position, etc. These robots are called Humanoid Robots or may be simply "Humanoids".

In general Humanoid robots have a torso with a head, two arms and two legs, although some forms of humanoid robots may model only part Of the body, for example, from the waist up. Some humanoid robots may also have a 'face, with 'eyes' and [I] mouth[l]

Features of Humanoid Robots

The characteristics features of Humanoid Robots include:

- ❖ Self-maintenance
- ❖ Autonomous learning
- ❖ Avoiding harmful situations to people, property, and itself
- ❖ Safe interacting with human beings and the environment

Working and Control Mechanism Concept of Zero Moment Point:
This concept explains the dynamic balance of humanoids during walking which requires information about the contact forces and the current and desired direction of motion.

As per the ZMP Theory, the pressure under supporting foot can be replaced by the appropriate reaction force acting at a certain point of the mechanism's foot. Since the sum of all moments of active forces with respect to this point is equal to zero, it is termed as the Zero Moment Point (ZMP).

Conclusion

Though the technology has advanced much in the field of Humanoid Robotics, there are still several problems which need attention. The technological brilliance of the humanoids is required to be sharpened more and the shortcomings in the results must be dealt with properly.

M. Ranjani (II C)

S. Sangeetha (II C)

Satellite TV

K. Dhilipan, IV Year ECE A Satellite TV is a type of television programming that is wirelessly delivered to TV sets across the world via a network of radio signals, communications satellites, broadcast centers and outdoor antennas. Broadcast signals are transmitted from satellites orbiting the Earth and received by local and regional satellite TV systems. *How Satellite TV service works* Satellite TV technology makes use of specialized antennas known as satellite dishes. These satellite dishes transmit signals to a satellite receiver such as a set-top box or satellite tuner module within a TV set. The programming source transmits signals to a satellite provider broadcast center and these waves are then picked up by a compact satellite dish and broadcast onto television sets. *Overview of Satellite TV Video Content Delivery.*

Satellite TV service can also be referred to as direct-broadcast satellite (DBS or DBSTV) service. A DBS provider will select programming—often a wide range of channels and services—and will then broadcast this content to satellite TV subscribers as part of a larger TV package. DBS programming can either be sent to a digital satellite receiver or an analog satellite receiver. Analog satellite television is slowly being replaced by digital satellite programming. Digital satellite television has become increasingly available in better quality known as HD TV (high-definition television). Digitally-broadcast content is characterized by greater picture and sound quality.

Satellite stations and broadcast television stations both transmit TV programming through radio signals. Years ago, the first satellite television TV technologies were broadcast in the C-band radio frequency range. Today, digital satellite TV content is transmitted in the Ku frequency range.

To further understand the technology behind direct-broadcast satellite systems, it is important to review the top features and elements involved in direct-broadcast satellite TV video content delivery: programming sources, satellite provider broadcast centers, satellites, satellite dishes and the satellite receivers.

K. Dhilipam (IV A)

The Art f Lecturing

Step in time and step in style,
Bearing all the while a beguiling smile;
Dresses neat and nicely pressed,
But your mind fully obsessed,
With only the subject of the day
To keep all doubts at bay.
Stand tall and trim in the hall
And survey at once students all;
As you speak and move,
Let your eyeballs rove,
So every student feels noticed,
All through the lecture practised.
Let high pitched be your voice,
To suspend the surrounding noise;
Blessed by the sublime soul of Socrates,
Ask searching questions, to test and tease.

Poems

Wandering and ogling eyes beware,
To refrain listening and escape your stare;
Check them all with questions galore,
To make them all, ponder and pore;
Stand not a statue on the stage,
Nor pace like a panther in a cage;
Appear smart and neatly dressed,
Bear a smile and be not depressed;
A dull and melancholy mood,
Makes no teaching good;
Write on board with clarity,
Albeit it is a rarity;
With many a joke to please the folk,
Now and then let a humour stroke;
Make your lecture lovable as a song,
And the notes kept as a treasure for long;
Speak the language with a flawless flow,
Unto the audience a countenance glow;
Raised and noble is thy rendition,
Trade not that high tradition;
Ordained by Almighty to teach;
Struck with an awe extreme,
Let them develop great esteem;
Give the calling a Godly grace
And desist from a mercenary race;
With will and pleasure bring light and cheer,

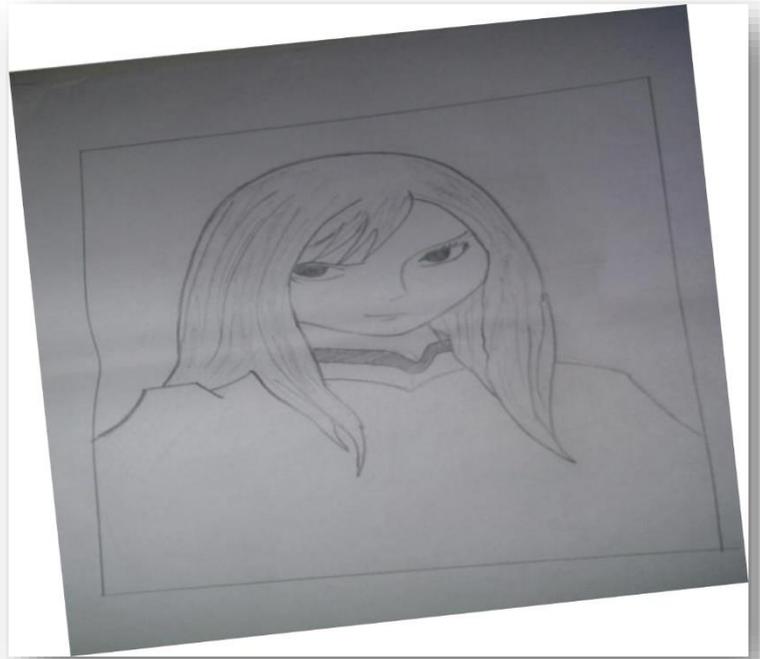To all the students, Oh dear !

M. Dheepa (II A)

R. Gavathiri (II A)

C. Sasirekha (IV C)

Pencil ART

A. Sathiya (II C)

S. Madanram (III B)