



# MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

Kalitheerthal kuppam, Madgadipet 605107



## ODD NEWSLETTER (AUGUST 2022 – DECEMBER 2022)



## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### 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

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.

PEO2: 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 OUTCOME

PSO 1: 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

Graduates of Electronics and Communication Engineering will

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.

PO 7: 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.

PO 10 : 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

Dr.S.Arunmozhi tutored VEDIC math for admitted first year student (batch 2022-2026) from 17<sup>th</sup> to 22<sup>nd</sup> Aug 2022.

D.Marygetsy completed MBA-HR in Pondicherry University (Distance) Aug 2022.

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

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

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

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 28<sup>th</sup> Nov to 2<sup>nd</sup> Dec 2022.

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 28<sup>th</sup> Nov to 2<sup>nd</sup> Dec 2022.

Mr. R. Sambath Kumar has attended International Seminar on FAH Science, Chettinad Academy on 3<sup>rd</sup> Dec 2022.

Dr. R. Sofia attended FDP on 3D BioPrinting and its Application, conducted by Biomedical Engineering Society in Karpagam Academy of Higher Education from 12<sup>th</sup> Dec to 17<sup>th</sup> Dec 2022.

Mrs.D.Marygetsy and Mrs R. Vithiya has attended the FDP titled Innovation in Recent Trends in Computation from JIS university from 28<sup>th</sup> Nov to 2<sup>nd</sup> Dec 2022.

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 26<sup>th</sup> to 30<sup>th</sup> Dec 2022.

Mr. C. Thiagarajan has attended the Workshop on “Python for Data Analytics”, conducted by Pondicherry University, Karaikal Campus dated on 26.09.2022.

# STAFF ACTIVITIES

Mr.Kumaran has attended HeadStart season 8 in Virtusa on 29<sup>th</sup> Sep 2022, Hyderabad.



Dr. S. Vinoth Published a paper titled “Enhanced structural, optical, and photo sensing properties of Ni-doped  $\text{Co}_3\text{O}_4$  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.

Dr. R. Sofia presented a Paper “Covid 19 detection from X ray scans using Machine Learning” in the conference ICIECS 2022.

Mr.M.Sivaraj and Mr. Kumaran has presented paper title “Enhancing train delay prediction using faster RCNN” in ICICEECI’22, dated 14.12.2022.

Dr. S. Arunmozhi, Mr. V. Rajesh and Mr.A. Baskaran has filed a patent “A Barcode Reader Enabled First Aid Box for Visually challenged people”.

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

Dr. Yazhiniyan has published 4 patents

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

# STAFF ACTIVITIES

Dr. S. Arunmozhi has got a certificate after completing the test in AICTE PRAKH



Dr. R. Sofia done a course in Udemy “OBE and academic quality assurance”



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



Dr.R.Sofia has completed the course in the Udemy platform “HOW TO WRITE A TEACHER’S LESSON PLAN FOR BEGINNERS” on 29th December 2022

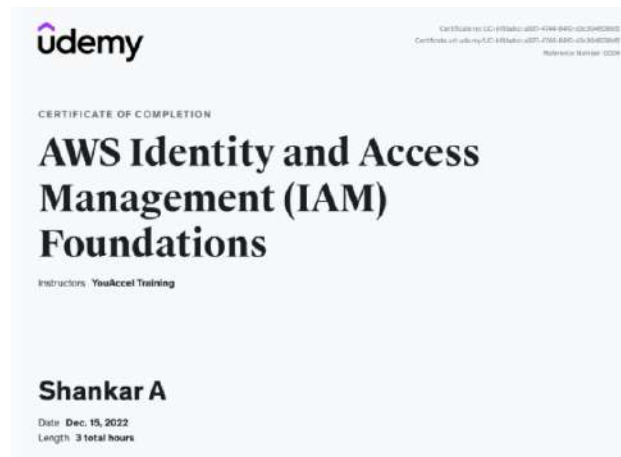


# STAFF ACTIVITIES

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



Mr.Shankar has completed the online course in the Udemy platform “AWS Identity and Access Management (IAM) Foundation” on 10th December 2022.





# STUDENT'S ACTIVITIES

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



Santhosh Kumar.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

Papitha A of IV ECE has successfully completed the Cyber Security offered by Digital Adda 23.09.22

Papitha A of IV ECE participated in the Quiz- International Olympic Day, conducted by Miranda House, DU 23.09.22.

Daranish S P, III ECE has participated in Youth Talk conducted by ICT academy on 27.09.22.

Vishnu.S, Santhosh Kumar.K, of III ECE has participated in National level symposium, conducted by University college of Engineering, on October 2022.

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

# STUDENT'S ACTIVITIES

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



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



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



# STUDENT'S ACTIVITIES

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

Yuvareshma.S, Rajasri.k,Dheena.K, Bethu Aswin, Ezhil E and Saravanan S has done a internship in Twilight IT solutions from 13.09.2022 to 12.10.2022

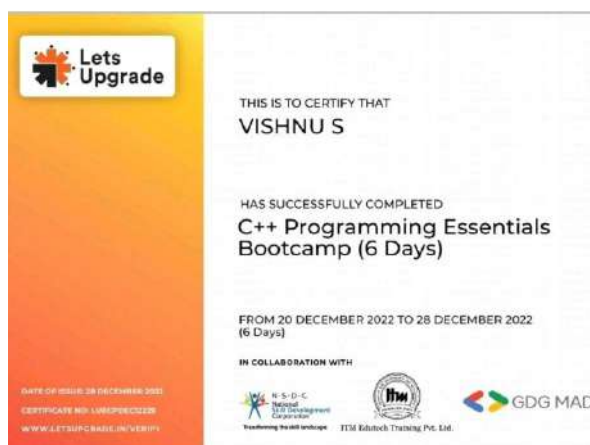
Nivedhini, Jayapriya.B, Kiruba Sriram, Yuvan Prabhu, Monika has done a internship in virtusa from 27.05.2022 to 29.11.2022

Gayathri.S has participated in MCCEES-2022 conducted by ACET on 25<sup>th</sup> Nov 2022 and won the First Prize

Pannerselvan and sharan of II year ECE has participated in Online Quiz on the Constitution of India conducted by Govt. of India Ministry of Parliament Affairs on 26<sup>th</sup> Nov 2022

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

S.Visnu III Year completed the course in the Lets Upgrade “C++ Programming Essencial Bootcamp” on 20th to 28th December 2022.



# STUDENT'S ACTIVITIES

V.P.Yuvalakshmi, B.Nithya sri, P.Suvetha, B.Sangamithra, V.Prabadevi and S.Depika from III-A have completed the inplant training in Television Broadcasting from 19-12-2022 to 23-12-2022 at Doordarshan Kendra, Puducherry.



# STUDENT'S ACTIVITIES

K.V Sreenidhi from II Year attended the VI Annual HR Conference held on 18th December 2022.



Navinkumar, Santhoshkumar and Fazil has attended the Techfinix'22 in Paavai Engineering College





## VALUE ADDED COURSE

III Year students have undergone Value added courses in several computer oriented programming on Sep 2022.

Global Certification Exam conducted for IV ECE students in the topic of “Java Programming” on 12th and 13th December 2022

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

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

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

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



# EXTENSION AND NSS ACTIVITY

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

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



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



## Product Developments and consultancy

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



## Activities of the Department (guest Lecture /workshop/special Lectures).

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





# PROGRAM ORGANIZED

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



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.





# PROGRAM ORGANIZED

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

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



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



# PROGRAM ORGANIZED

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



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

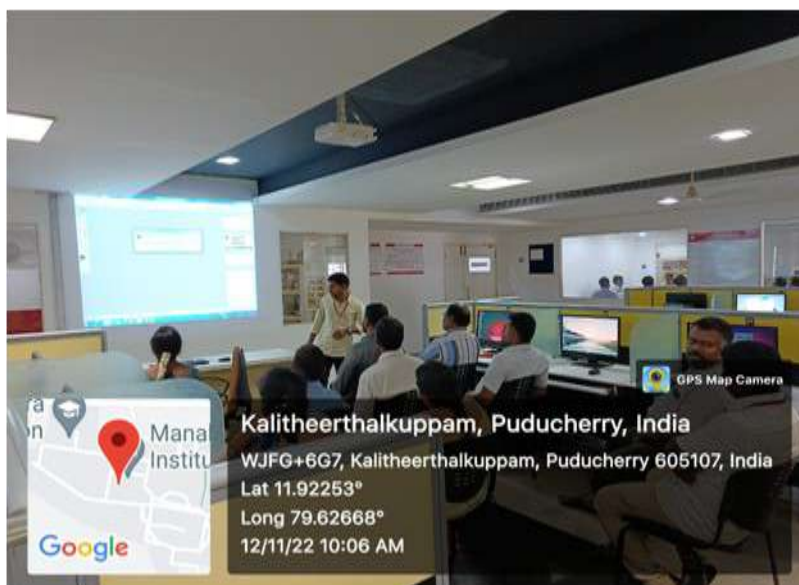


# PROGRAM ORGANIZED

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

Workshop about NIRF Frame Work 2023 on 25.11.2022.

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



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





# PROGRAM ORGANIZED

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

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

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

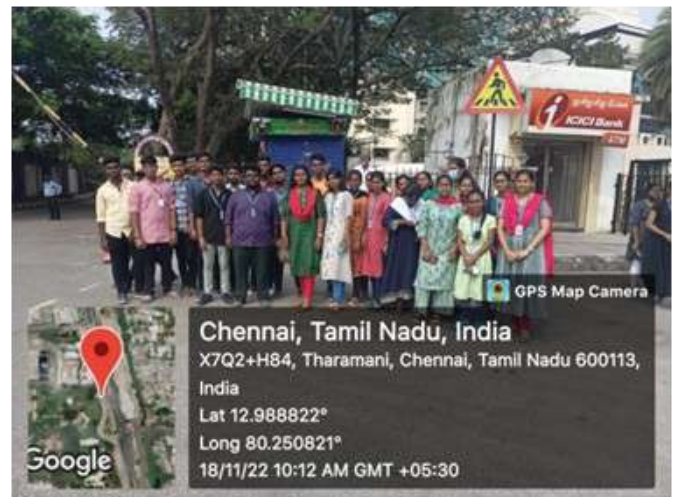


Dr.R.Sofia organized the workshop for III Year students in the topic of “TINKERCAD AND CISCO PACKET TRACER” on 21st December 2022.



# PROGRAM ORGANIZED

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





# PROGRAM ORGANIZED

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 SECTOR” on 21st December 2022.



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

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

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

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

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.



# ACHIEVEMENTS AND AWARDS

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



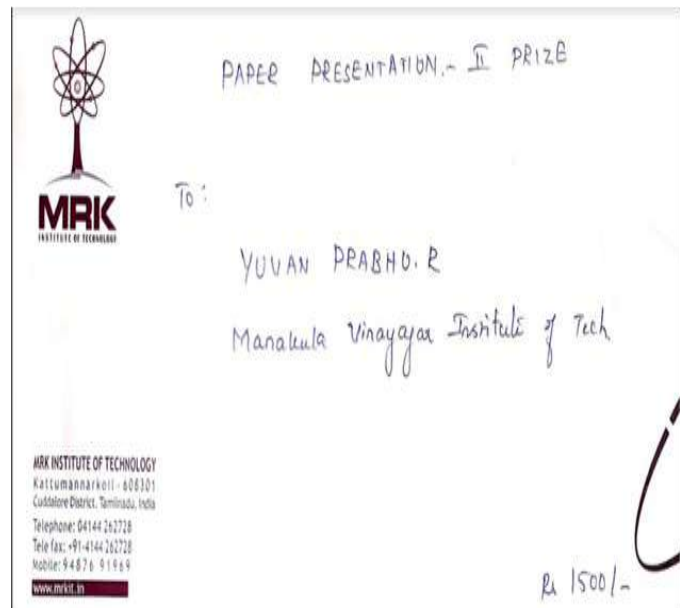
S.Vishnu from III Year B Sec is a member of AWS Emerging Talent community from October 2022.





# ACHIEVEMENTS AND AWARDS

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



Mr.Shankar has completed the training program under “National Intellectual Property Awareness Mission” on 16th December 2022.

