



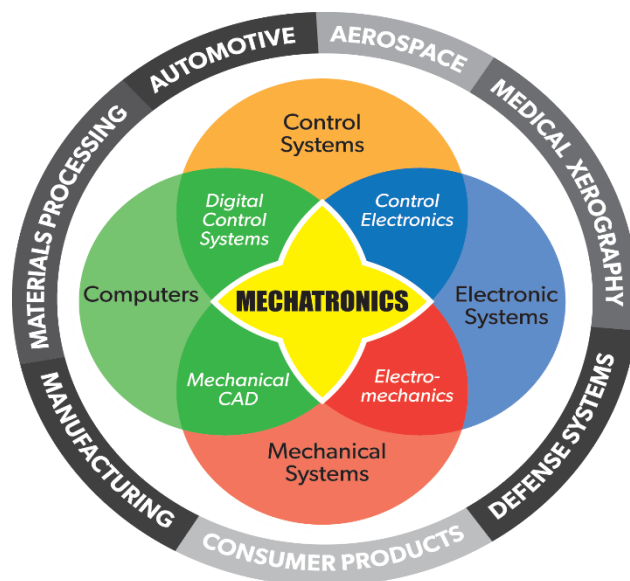
**(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)**

**S.P.G.Chidambara Nadar - C.Nagammal Campus**

**S.P.G.C. Nagar, K.Vellakulam – 625 701 (Near VIRUDHUNAGAR).**

## **DEPARTMENT OF MECHATRONICS ENGINEERING**

# **MECHATRONZ**



*August 2021*

**DEPARTMENT OF MECHATRONICS ENGINEERING**

**KAMARAJ COLLEGE OF ENGINEERING & TECHNOLOGY**

## **DEPARTMENT OF MECHATRONICS ENGINEERING**

### **VISION**

To make the department of mechatronics engineering unique in the field of research and development towards industrial automation & robotics.

### **MISSION**

To impart highly innovative and technical knowledge in mechatronics to the urban and unreachable rural students through “total quality education”.

### **PROGRAMME EDUCATIONAL OBJECTIVES**

1. To provide basic knowledge in physics, chemistry, mathematics and necessary foundation in various concepts of mechatronics.
2. To impart training to the students to solve the real time problems related to the field of mechatronics and allied areas faced by the industry and society.
3. To provide an academic environment for the students to develop team spirit, leadership qualities, communication skills and soft skills exhibit professional responsibility with ethical code of conduct.

### **PROGRAM SPECIFIC OUTCOMES (PSO)**

1. To understand and apply the recent technological developments in Engineering to develop products & software to cater the Societal & Industrial needs.
2. To develop solutions for fast learning and successful retention for the entire spectrum of automation technology.

## **PROGRAM OUTCOMES**

### **Engineering Graduates will be able to:**

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, research literature, and analyze electrical and electronics engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for problems in the field of electrical and electronics engineering and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and cultural, societal, and environmental considerations.
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.
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.
6. **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.
7. **Environment and sustainability:** Understand the impact of the electrical and electronics engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice

9. **Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on electrical and electronics engineering activities with the engineering community and with the society, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
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.
12. **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.

## **ABOUT THE DEPARTMENT OF MECHATRONICS ENGINEERING**

Our college with a vision to promote quality technical education to the rural folks, kicked off in the year 1998 with four branches. Knowing the importance of core branches, our dream to start Mechatronics branch comes true during the academic year 2014-2015. Mechatronics Engineering is a well-recognized course gaining importance in the industrial world. The unique features of the programme when compared with other B.E. programmes are the students are

1. Well equipped with computer skills
2. Trained in operating micro-controllers and programmable logical controllers.
3. Practiced in handling industrial sensors, hydraulic, pneumatic and electric drives.
4. Experienced in design of mechanical structure and learning of mechanisms in Manufacturing process.

This programme gives an exposure to bio-mechatronics, which integrates mechanical parts with a human being. The students of Mechatronics Engineering will do their project work in leading industries, which will help them to apply their theoretical knowledge to formulate and solve real life problems. This will be base for handling more challenging projects in an innovative application oriented projects from real life situations. The project work enables students to develop decision-making skills and to adapt to various uncertain situations in teams. Mechatronics Engineering helps the students to be placed in factories related to Robotics & Automation, Smart sensors & Actuators, MEMS & NEMS, Motion control systems, Computational intelligence, Real time embedded systems, Bio-mechatronics and Medical robotics.

## **ABOUT THE MECHATRONZ'21**

This Newsletter brings the outline of our Department activities of the academic year 2020-2021.

## **DEPARTMENT OF MECHATRONICS ENGINEERING**

**“Integration of mechanics, electronics and intelligent digital controlling”**

### **TOP 10 REASONS TO GET A MECHATRONICS DEGREE**

- ✓ Multidisciplinary skills.
- ✓ High-impact jobs.
- ✓ Hands-on labs.
- ✓ Resources and equipment.
- ✓ Internships.
- ✓ Insider insights.
- ✓ Applicable skills.
- ✓ High standards.
- ✓ Good paying jobs + high starting salaries.
- ✓ A resume that stands out.

### **LABORATORY DETAILS**

- ✓ Robotics Lab
- ✓ Microprocessor Lab
- ✓ Mechatronics Lab
- ✓ CAD Lab
- ✓ Industrial Automation Lab

### **SALIENT FEATURES**

- ✓ KAMARAJ - SMC Pneumatics Centre for excellence
- ✓ FPSI Society
- ✓ ISTE Student Chapter
- ✓ Association of Mechatronics Engineering

# Department of Mechatronics Engineering

## Faculty Profile



**Dr. K. KANNAN**

Associate Professor (Senior Scale) & Head

Sl. No	Name of the Faculty with Designation	Qualification	Specialization
1.	Dr. K. Kannan, Associate Professor	M.E., M.E., Ph.D.,	Digital Image Processing
2.	Mr. G. Sakthivel, Assistant Professor	M.E., (Ph.D)	Power Electronics & Drives
3.	Mr. A. Arul Kumar, Assistant Professor	M.E., (Ph.D)	Power Electronics & Drives
4.	Mr. S. Kannappan, Assistant Professor	M.E., (Ph.D)	CAD/CAM
5.	Mr. P. Balasundar, Assistant Professor	M.E., (Ph.D)	Manufacturing Engineering
6.	Mr. S. David Blessley, Assistant Professor	M.E., (Ph.D)	Manufacturing Engineering
7.	Mr. A. Ganesan, Assistant Professor	M.E.,	Thermal Engineering
8.	Mr. S. Wesley Moses Samdoss, Assistant Professor	M.E.,	Communication & Networking

# Department of Mechatronics Engineering

## Association Activities

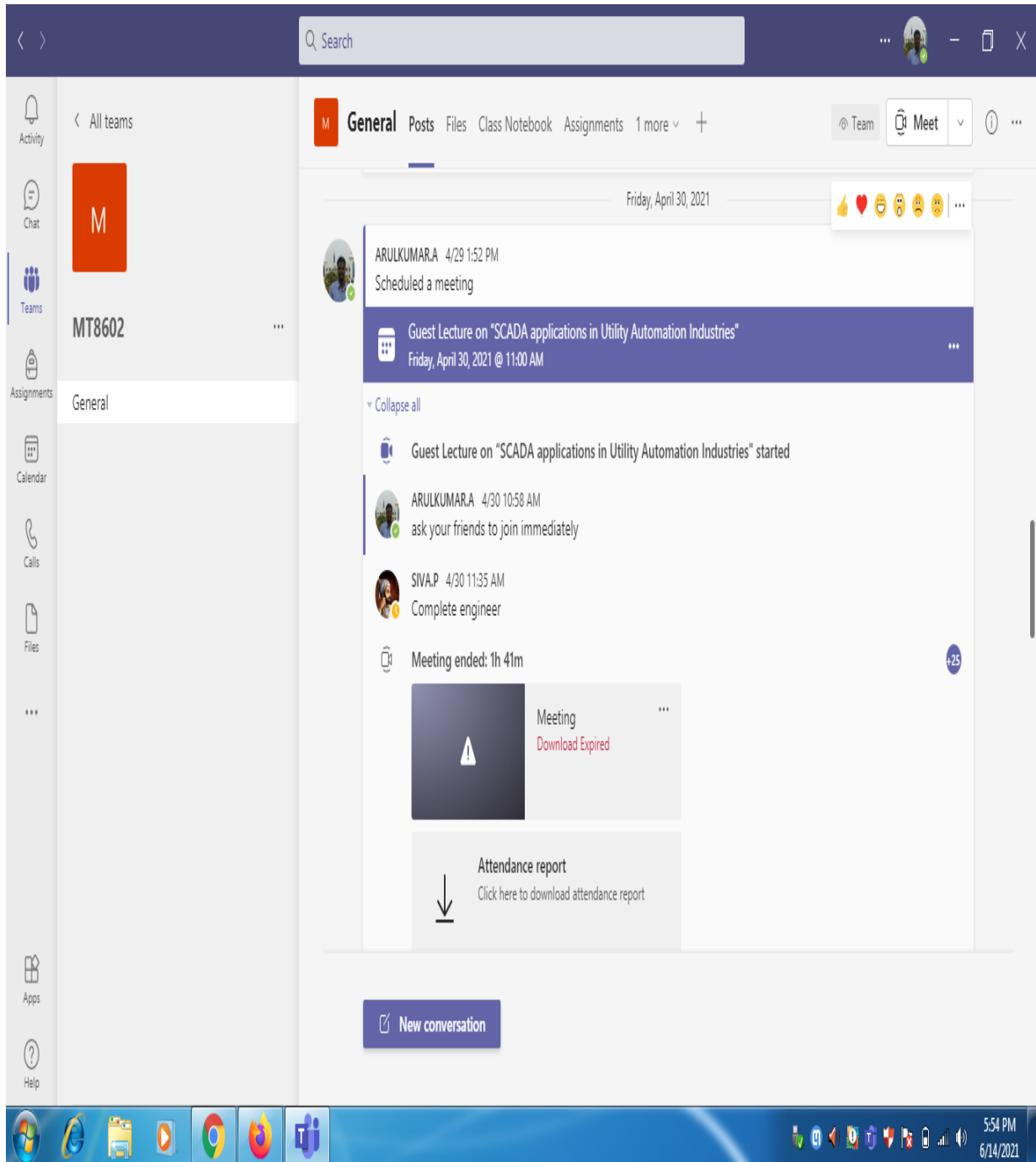


One day Workshop on “**Introduction to Labview**” on 24-02-2021 by Dr. S. Jeyadevi, Prof. & HoD, Ms. S. Kavitha, AP-EIE Dept., KAMARAJ College of Engineering and Technology, Virudhunagar.





One day programme on **“Pathway to Pinnacle (P2P) program”** on 17-03-2021 by Mr. Jeyaraman Umasankar, Freelance Trainer & Consultant, Salem.



**Guest Lecture on “SCADA applications in Utility Automation Industries” on 30-04-2021 by Mr. M. B. Balaji, B.E., R & D Engineer, ABB Chennai.**



DEPARTMENT OF MECHATRONICS ENGINEERING

CIRCULAR

Ref: KCET/MTRE/ISTE TC1 / May 2020 - 21

03.05.2021

The Department of Mechatronics Engineering on behalf of ISTE student chapter is organizing a Poster Presentation on “COVID-19 Awareness & its Vaccination” on 08.05.2021. The details of the programme are as follows:

**Date** : 08.05.2021 (Saturday)  
**Time** : 10.00 a.m to 1.00 p.m  
**Mode of Presentation** : Online Platform-Teams  
**Topic** : Poster Presentation on “COVID-19 Awareness & its Vaccination”  
**Relevance to PO** : PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10.  
**Relevance to PSO** : -  
**Event Outcome** : This program enables the students to get and create the awareness about the COVID-19 Corona Virus and its Vaccination benefits.

Hence the interested students of II & III year Mechatronics students are instructed to form the teams ( Maximum of 3 Members/Team) or individual Category and enroll their names to our department ISTE in-charge Mr.A.Arulkumar, AP/MTRE on or before 05.05.2021.

  
Coordinator 03/05/2021

  
HoD/MTRE

1. Cc to Department Main Notice Board.
2. To II&III Year Students Through their official mail.
3. Department Circular File.

One day ISTE Online Poster Competition on “Covid-19 Awareness & its Vaccination” on 08-05-2021 by Mr. A. Arulkumar M.E., AP-MTRE, KAMARAJ College of Engineering and Technology, Virudhunagar.

# ISHRAE

Madurai Chapter



## ISHRAE MADURAI CHAPTER

Jointly Organises with

**KAMARAJAR COLLEGE OF ENGINEERING & TECHNOLOGY**

ISHRAE Student Chapter

**Dr. P. Udhayakumar**



Dr. P. Udhayakumar Professor & Head in the Department of Mechanical Engineering and Training and Placement Officer, K.L.N. College of Engineering, Madurai. He is having more than nineteen years of teaching experience including seven years of training and placement experience. He is the recognized supervisor for guiding Ph.D programmes in Anna University Chennai. He has published 10 research papers in the International Journals and presented 47 research papers both in International and National Conferences. He is the recipient of Young Faculty Award, Best Training and Placement Officer Award, Best Faculty Advisor Award in IEI, Mother Teresa Sadbhavana Award, Rashtriya Vidya Gaurav Gold Medal Award and Rajiv Gandhi Education Excellence Award. He is a Life member in ISTE, Fellow Member in IEI, Member in ISHRAE and Member in IEAE. Currently, he is a National Vice Chair – Student Activities in ISHRAE HQ, Program Mentor in ISHRAE Madurai Chapter and Committee Member for Mechanical Division Board for the Institution of Engineers (India), Madurai Local Centre.

**Topic : Orientation Program**



**Mr. N. Bala Chandran**



Proprietor - Sree Engineering  
Working more than Two Decades in Refrigeration & Cold chain Industry.  
ISHRAE Madurai Treasurer (SY - 2021-22).

**Topic : Refrigeration - Basics, Applications and Opportunities**

**Online Platform : Google Meet**

[Click here to Join](#)

RSVP

**Dr. K. Srithar**  
President  
98421 85302

**Mr. G. Savaridoss Franklin**  
President Elect.  
93671 65489

**Mr. K. A. Kaja Mohaideen**  
Secretary  
95664 35455

**Mr. N. Balachandran**  
Treasurer  
94867 82274

**Dr. G. Kumaraguruparan**  
Student Activities Chair  
98652 07240

ISHRAE Madurai

ishrae\_madurai

#No-25A, First Floor, Arasaradi Main Road, opp. to Suguna Mahal, Madurai - 625 016.

Orientation Program on “**Refrigeration –Basics, Applications and Opportunities**” on 15-05-2021 by Mr. N. Bala Chandran, Proprietor, Sree Engineering, ISHRAE Madurai Chapter Treasurer and Dr.P.Udhayakumar, Professor & Head, Mechanical Engineering, K.L.N College of Engineering.

## Department of Mechatronics Engineering

### NEW INFRASTRUCTURE DEVELOPMENT



**Our department has successfully established Robotics  
Laboratory with 1 DOF, 2 DOF and 4 DOF Robots on  
03/10/2020**

## **Department of Mechatronics Engineering**

### **Journal Publications**

- ❖ Mr. P. Balasundar et al. has published a research paper on the title of “Saccharum barberi grass bagasse ash-based silicone rubber composites for electrical insulator applications” in Iranian Polymer Journal, Springer Publishers. (ISSN 1026-1265).
- ❖ Mr. P. Balasundar et al. has published a research paper on the title of “Studies on adhesion strength and corrosion behavior of ZnO-Mg coated on AISI 4140” in Surfaces and Interfaces, Elsevier Publishers. (ISSN 2468-0230).
- ❖ Mr. P. Balasundar et al. has published a research paper on the title of “Characterization of Musa paradisiaca L. cellulosic natural fibers from agro discarded blossom petal waste” in Journal of Natural Fibers, Taylor and Francis Publishers. (ISSN 1544-0478).

### **Book/Book Chapter Publications**

- ❖ Mr. P. Balasundar et al. has published a book chapter on the title of “A review on the factors influencing natural fiber composite materials. HYBRID NATURAL FIBER COMPOSITES - Chapter 10” in book chapter of Woodhead Publishing Series in Composites Science and Engineering - Elsevier. (ISSN 978-0-12-819900-8).

## **Department of Mechatronics Engineering**

### **Attended FDPs/STTPs/Fellowship Programmes**

- ❖ Dr.K.Kannan, HoD / MTRE attended Six Days STTP on “High Intense Course on Machine Learning with MATLAB”, sponsored by AICTE, organized by Department of ECE, Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engg College, Chennai, from 07/12/2020 to 12/12/2020.
- ❖ Our Faculty members Mr. Wesley Mosses Samdoss, Mr. S.Kannappan & Mr. P. Balasundar successfully attended online induction program “Inculcating Universal Human Values in Technical Education” organized by AICTE from 19/10/2020 to 23/10/2020.
- ❖ Mr. A. Ganesan has completed a 6 weeks course on “Excel Skills for Business; Essentials” by Coursera.
- ❖ Mr. P. Balasundar, AP / MTRE attended three Days STC on “Engineering Materials and Characterization”, sponsored by TEQIP-III, organized by Department of Mechanical Engg, Government College of Engg, Odisha from 11/12/2020 to 13/12/2020.
- ❖ Dr.K.Kannan, HoD / MTRE completed “Design Thinking” - NPTEL course on 18/12/2020.
- ❖ Mr. P. Balasundar, AP / MTRE attended three Days FDP on “Kinematics of Machinery”, organized by Department of Mechanical Engg, Mohamed Sathak AJ College of Engg, Ramanathapuram from 28/12/2020 to 30/12/2020
- ❖ Mr.S.Wesley Moses Samdoss, AP / MTRE attended two Days Virtual FDP on “Data Science and Artificial Intelligence”, organized by PALS on 05/01/2021 & 06/01/2021

- ❖ Mr.S.Kannappan, AP / MTRE attended one week FDP on “Recent Advances in Automation Technology in achieving Industry 4.0”, sponsored by AICTE (ATAL), organized by Department of Mechanical Engg, Chennai Institute of Technology from 25/01/2021 to 29/01/2021
  
- ❖ Dr. K. Kannan, HoD / MTRE acted as a judge for National Conference on “Intelligent Computing and Automation – INSTRUVISION’21” on 09/04/2021 organized by Department of E&I, KAMARAJ College of Engineering and Technology
  
- ❖ Mr. A. Ganesan, AP / MTRE Participated in the Expert Talk on DIGITAL MANUFACTURING organized by the Department of Mechanical Engineering, Sathyabama Institute of Science and Technology, Chennai on 01/07/2021
  
- ❖ Mr. S. Kannappan, AP / MTRE attended FDP on “3D printing and Design”, sponsored by AICTE (ATAL), organized by Department of Mechanical Engineering, Dr. Mahalingam College of Engineering and Technology from 06/07/2021 to 10/07/2021
  
- ❖ Mr. S. David Blessley, AP / MTRE attended STTP on “Technology Enablers for Smart Manufacturing using Industry 4.0” Organized by Department of Mechanical Engineering, NITTE Meenakshi Institute of Technology, Bangalore from 12/07/2021 to 16/07/2021.
  
- ❖ Mr. A. Ganesan, AP / MTRE attended FDP on “Unconventional Machining Processes” organized by the Department of Mechanical Engineering, Sri Sairam Engineering College, Chennai from 26/07/2021 to 02/08/2021.



## Department of Mechatronics Engineering

### Placement Details

<b>S. No.</b>	<b>Name of the Student Placed</b>	<b>Name of the Employer</b>
1	Kamalanathan S	Garuda Aerospace Private Limited
2	Venkateshwaran G	Garuda Aerospace Private Limited
3	Giridhari S	Garuda Aerospace Private Limited
4	Subash S	Garuda Aerospace Private Limited
5	Selvakumar S	Garuda Aerospace Private Limited
6	Karthikeyan V	Tata Consultancy Services, Chennai.
7	Shanmuga Perumal B	Impactional Games Private Limited, New Delhi
8	Ganesan M	J K Fenner Limited, Madurai.
9	Ramar Selvam C	Brakes India Private Limited, Chennai.
10	Sivaharish N	Brakes India Private Limited, Chennai.
11	Selvakumar S	Brakes India Private Limited, Chennai.

12	Saran V J	Brakes India Private Limited, Chennai.
13	Saravanan M	Brakes India Private Limited, Chennai.
14	Mareeswaran M	Brakes India Private Limited, Chennai.
15	Prabhu D M	Brakes India Private Limited, Chennai.
16	Dhanabalan K	Brakes India Private Limited, Chennai.
17	Aakash J	Brakes India Private Limited, Chennai.
18	Dhanabalan K	WAPCO TVS, Chennai.
19	Dinesh Kumar K	WAPCO TVS, Chennai.
20	Prabhu D M	WAPCO TVS, Chennai.
21	Ramar Selvam C	WAPCO TVS, Chennai.
22	Mukesh Kannan B	HCL Technologies, Madurai
23	Deeparaj Annamalai C	Katomaran Technologies, Coimbatore.
24	Abishek Samuel Babu	Accenture, Chennai.
25	Subash S	Focus Edumatics, Bangalore.
26	Subash S	Digital Minds Technologies, Chennai.

27	Shanmuga Perumal B	Techchef Consulting India Pvt. Ltd, Bangalore.
28	Mohammed Riyas S	Tata Consultancy Services, Chennai.
29	Dhanabalan K	KYUNGSHIN – Motherson, Chennai.
30	Dinesh Kumar K	KYUNGSHIN – Motherson, Chennai.
31	Sabarai S	Nirman Technologies, Chennai.
32	Aravindasundar M	Nirman Technologies, Chennai.
33	Kamalanathan S	AMAZON Services, Chennai.
34	Dev Ajay Kumar V S	Infosys Tchnologies, Chennai.
35	Aravindasundar M	Cloud Destinations, Coimbatore.

## Department of Mechatronics Engineering

### Higher Studies Details

<b>S. No.</b>	<b>Name of the Student</b>	<b>Degree</b>	<b>Name of the Institution</b>
1	Eashwar N N	MSc Artificial Intelligence and Applications.	University of Strathclyde Glasgow, UK.
2	Surya Prakash S	M.Tech in Robotics and Automation	Amirta Vishwa Vidyapeetham, Kerala.

## **Department of Mechatronics Engineering**

### **Students Co-Curricular Activities**

### **Project Publications in Conferences**

- ❖ Ajay Rahul. S, Indra Prakash. S & Saravanan. M of IV MTRE presented a paper titled “Color Based Segregator and Transporter model” on 05/03/2021 at International Conference on Research and Development in Science, Engineering and Technology (ICRDSET-2021) organized by St.Anne’s College of Engineering and Technology, Panruti.
- ❖ Harshini.T, Sivakumar.T, Ramesh Pandian.A and Thangamanikandam.M of III MTRE presented a paper titled “Applications of Intranet connected IoT on Home automation” on 19/03/2021 at “Conference on Automation, Robotics, Artificial Intelligence and Mechatronics (Aram-2021)” organized by Department of Mechanical Engineering, SSN College of Engineering, Chennai
- ❖ Deeparaj Annamalai. C, Dev ajay kumar. V.S and Abishek samuel babu of IV MTRE presented a paper titled “Implementation of slam based autonomous robot” on 19/03/2021 at “Conference on Automation, Robotics, Artificial Intelligence and Mechatronics (Aram-2021)” organized by Department of Mechanical Engineering, SSN College of Engineering, Chennai
- ❖ Rahini.G of III MTRE presented a paper titled “Energy Monitoring and Management system” on 27/03/2021 at ORKESTRTM’21 organized by Department of EIE, SRM Valliammai Engineering College, Chennai and she Won II prize

- ❖ Rohini.G of III MTRE presented a paper titled “Battery management system using energy monitoring and management” on 27/03/2021 at ORKESTRTM’21 organized by Department of EIE, SRM Valliammai Engineering College, Chennai
- ❖ Rahini.G of III MTRE presented a paper titled “Low energy Efficient-Utilization of waste steam from IC Engines to generate electricity” on 28/03/2021 at Present Up-Paper Presentation organized by Jeppiaar Engineering College, Chennai
- ❖ Rohini.G of III MTRE presented a paper titled “Battery management system using low energy efficient system” on 28/03/2021 at Present Up-Paper Presentation organized by Jeppiaar Engineering College, Chennai
- ❖ Harshini.T of III MTRE presented a paper titled “Future of Communications” on 28/03/2021 at Present Up-Paper Presentation organized by Jeppiaar Engineering College, Chennai.
- ❖ T. Harshini & T. Sivakumar of III MTRE & Dr. K. Kannan, HoD / MTRE presented a paper titled “Image Enhancement using Rolling Guidance Filter” on 09/04/2021 at National Conference on “Intelligent Computing and Automation – INSTRUVISION’21” organized by Department of E&I, KAMARAJ College of Engineering and Technology
- ❖ Sherwin Sam. S, David Lazer. A, Shanmuga Perumal. B of IV MTRE & Kannappan. S, AP/MTRE presented a paper titled “Smart Plant Monitoring Robot” on 09/04/2021 at National Conference on Intelligent Computing and Automation-INSTRUVISION’21 organized by KAMARAJ College of Engineering and Technology, Madurai.
- ❖ Ajai. J, Giridhari. S, Kamalanathan. S of IV MTRE & Balasundar. P, AP/MTRE presented a paper titled “Prosthetic Arm controlled by Muscle Electromyography” on 09/04/2021 at National Conference on Intelligent Computing and Automation-INSTRUVISION’21 organized by KAMARAJ College of Engineering and Technology, Madurai.

- ❖ Sabari. S, Honest raj. V, Ashwin. T of IV MTRE & Dr. K. Kannan, HoD / MTRE presented a paper titled “Vision based path planning robot” on 09/04/2021 at National Conference on Intelligent Computing and Automation-INSTRUVISION’21 organized by KAMARAJ College of Engineering and Technology, Madurai.
- ❖ Mareeswaran. M, Aakash. J, Bala Vishnu Prakash. M of IV MTRE & Ganesan. A, AP / MTRE presented a paper titled “IOT Based health Monitoring System” on 09/04/2021 at National Conference on Intelligent Computing and Automation-INSTRUVISION’21 organized by KAMARAJ College of Engineering and Technology, Madurai.
- ❖ Abishek. S, Mukesh Kannan. B, Sankar. R of IV MTRE & Ganesan. A, AP / MTRE presented a paper titled “Modified Milk Packing Machine” on 09/04/2021 at National Conference on Intelligent Computing and Automation-INSTRUVISION’21 organized by KAMARAJ College of Engineering and Technology, Madurai.
- ❖ Mohamed Riyas. S, Vijay. S, Kaviyarasan. M of IV MTRE & Kannappan. S, AP / MTRE presented a paper titled “Automatic Railway Platform” on 09/04/2021 at National Conference on Intelligent Computing and Automation-INSTRUVISION’21 organized by KAMARAJ College of Engineering and Technology, Madurai.
- ❖ Karthikeyan. V of IV MTRE & Mr. Wesley Moses Samdoss.S, AP/MTRE presented a paper titled “Human error elimination in Paint filling Machine” on 09/04/2021 at National Conference on Intelligent Computing and Automation-INSTRUVISION’21 organized by KAMARAJ College of Engineering and Technology, Madurai.
- ❖ Ajmal. D, Saran. V. J of IV MTRE & Kannappan. S, AP / MTRE presented a paper titled “Automatic Blow down system using TDS Sensor in boiler” on 09/04/2021 at National Conference on Intelligent Computing and Automation-INSTRUVISION’21 organized by KAMARAJ College of Engineering and Technology, Madurai.

- ❖ Uben karthick. R. G, Harikrishna. M of IV MTRE & Sakthivel. G, AP / MTRE presented a paper titled “Automatic Black box for tracking and emergency system” on 09/04/2021 at National Conference on Intelligent Computing and Automation-INSTRUVISION’21 organized by KAMARAJ College of Engineering and Technology, Madurai.
- ❖ Allwyn Antony Roy. J, Sai Sethuraman. M, Shahid Afridi. M of IV MTRE & Sakthivel. G, AP / MTRE presented a paper titled “Segregation and Management of Garbage bins via Automation” on 09/04/2021 at National Conference on Intelligent Computing and Automation-INSTRUVISION’21 organized by KAMARAJ College of Engineering and Technology, Madurai.
- ❖ Dhinesh kumar. K & Siva Harish. N. of IV MTRE presented a paper titled “Remote controlled solar powered Pesticide Sprayer” on 09/04/2021 at National Conference on Intelligent Computing and Automation-INSTRUVISION’21 organized by KAMARAJ College of Engineering and Technology, Madurai.
- ❖ Mathesh kumar. P & Surya Prakash. S. & Vengatesh. G of IV MTRE & Dr. K. Kannan, HoD / MTRE presented a paper titled “Developing a Semi-Automatic PVC pipe bending machine using Pneumatics” on 09/04/2021 at National Conference on Intelligent Computing and Automation-INSTRUVISION’21 organized by KAMARAJ College of Engineering and Technology, Madurai.
- ❖ Kowsik Nivas. A, Ramarselvam. C & Vengateshwaran. G of IV MTRE presented a paper titled “Smart Safety Device in Mines” on 16/04/2021 at National Conference on Evaluation and Future scope of Mechanical Science-EFMS’21 organized by Bannari Amman Institute of Technology, Sathyamangalam.
- ❖ T. Harshini, T. Sivakumar, A. Ramesh Pandian, G. Rahini, G.Rohini & M. Thangamanikandan of III-MTRE participated in Igniting Young Minds a unique ‘Research



Paper' cum Poster Presentation organized by St. John college of Engg and Mgmt on 17/04/2021

- ❖ Ajay Rahul. S, Indra Prakash. S & Saravanan. M of IV MTRE presented a paper titled “Color Based Segregator and Transporter model” on 24/04/2021 at First Virtual International Conference on Green Energy and Smart Technologies organized by JP College of Engineering, Tenkasi
- ❖ Benwin steward. J. S, Eashwar. N. N & Aravinda sundar. M of IV MTRE presented a paper titled “Real time image captioning with speech” on 24/04/2021 at First Virtual International Conference on Green Energy and Smart Technologies organized by JP College of Engineering, Tenkasi.
- ❖ Ganesan. M, Subash. S & Ram divakar. R of IV MTRE presented a paper titled “Hydraulic assisted Injection Moulding Machine” on 24/04/2021 at First Virtual International Conference on Green Energy and Smart Technologies organized by JP College of Engineering, Tenkasi.
- ❖ Dhanabalan. K, Selvakumar. S & Viswanath. S of IV MTRE presented a paper titled “Android Controlled Pick and Place Robotic vehicle” on 24/04/2021 at First Virtual International Conference on Green Energy and Smart Technologies organized by JP College of Engineering, Tenkasi.
- ❖ Dev Ajai Kumar. V. S, Deeparaj Annamalai. C & Abishek Samuvel Babu of IV MTRE presented a paper titled “Implementation of SLAM Based Autonomous Navigation” on 24/04/2021 at First Virtual International Conference on Green Energy and Smart Technologies organized by JP College of Engineering, Tenkasi.
- ❖ Prabha. G, Sankara Narayanan. S & Karthick raja. P of IV MTRE presented a paper titled “Automatic Fire Extinguisher robot” on 24/04/2021 at First Virtual International

Conference on Green Energy and Smart Technologies organized by JP College of Engineering, Tenkasi.

- ❖ Prince Yona RLC, Vishnu Kumar P of III MTRE and Mr. S. Kannappan, AP / MTRE presented a paper on “Design and Fabrication of Theo Jansen Linkage Mechanism Bot” at IIRM-SDT's 2nd International Conference on Current Research Trends in Engineering and Technology- 2021 (ICCRET-21) conducted on 09/05/2021
- ❖ P. Siva, R. Sivaraj, S. Joy Sebastin and V. Tamilselvan of III MTRE presented a paper on “Vision Based Autonomous Car” at National level student conference IEEE TECHNICO KNOCKDOWN - 2021 (TKD-21) conducted by Shingad Institute of Technology, Lonavala on 30/05/2021

## Department of Mechatronics Engineering

### Students Co-Curricular Activities

#### Winners Details

<b>S. No.</b>	<b>Name of the Student</b>	<b>Date</b>	<b>Name of the activity</b>	<b>Organizing Institute</b>	<b>Prizes Won</b>
1	Deeparaj Annamalai C.	May 2021	General quiz event	IEE Robotics and Automation Society, Kerala Chapter.	First
2	Rahini G.	27/03/2021	ORKESTRTM'21 - Paper Presentation	Department of EIE - SRM Valliammai Engineering College, Chennai.	Second

# Department of Mechatronics Engineering

## Students Co-Curricular Activities

### Participation Details

- ❖ Siva. P participated in “Best HR Event” organized by Department of MBA, K.Ramakrishnan College of Engineering Samayanallur on 12/03/2021.
- ❖ Abishek Samraj.J, ThangaManikandan.M, Diyanesh.D, Rhishikesh.B and Saravanakumar.P presented their vehicle design idea in Indian Kart Racing Championship (IKRC) virtual event on 19/03/2021.
- ❖ D. Devadharshini of II MTRE attended three Days Workshop on “Stepping in to ROS” from 27/03/2021 to 29/03/2021 organized by Kumaraguru College of Technology, Coimbatore
- ❖ R. Gokul Saravanan. of III MTRE successfully completed online course on “Electric Vehicle Design Using MATLAB Master Class” conducted by Pantech Solutions from 29/03/2021 to 02/04/2021
- ❖ Siva. P, Sivakumar. T & Gokul Saravanan. R of III MTRE participated in national level technical seminar on “Industrial Automation” organized by Department of E&I, KAMARAJ College of Engineering and Technology on 03/04/2021
- ❖ J. Thirumalaiselva & A. P. Bawankalyan of II MTRE attended a Virtual Workshop on “Fundamentals of Mechatronics” on 03/04/2021 organized by SKYY Rider Institution
- ❖ D. Santhosh Elavarasan, A. P. Bawankalyan & J. Thirumalaiselva of II MTRE attended a Virtual Workshop on “Automatic CNC Programming by MasterCAM” on 05/04/2021 organized by SKYY Rider Institution
- ❖ R. Gokul Saravanan of III MTRE successfully completed online course on “Power Electronics Using MATLAB Master Class” conducted by Pantech Solutions from 12/04/2021 to 17/04/2021
- ❖ R. Gokul Saravanan of III MTRE successfully completed online course on “Image Processing Using MATLAB Master Class” conducted by Pantech Solutions from 12/04/2021 to 16/04/2021

- ❖ G. Jayasurya A of III MTRE successfully completed online course on “Power Electronics Using MATLAB Master Class” conducted by Pantech Solutions from 12/04/2021 to 17/04/2021
- ❖ Siva. P of III MTRE successfully completed online course on “IT Security 101 – Cyber security for beginners” conducted by Udmey on 17/04/2021
- ❖ J. Thirumalaiselva, P. Baskara Pandi & S. Santhosh of II MTRE attended a Workshop on “Motion Simulation in SOLIDWORKS” on 17/04/2021 organized by CADD Centre, Madurai
- ❖ Siva. A of II MTRE successfully completed online course on “Machine Learning Master Class” conducted by Pantech Solutions from 19/04/2021 to 23/04/2021.
- ❖ Siva. A of II MTRE participated in webinar titled “Trends and opportunities in Industrial Robotics and Automation” conducted by Department of EEE, RTMNU, Nagpur on 24/04/2021.
- ❖ T. Harshini & T. Sivakumar of III-MTRE completed online course on MATLAB onramp.
- ❖ M. Sylesh Karthick, Rahini G and Rohinin G qualified the State level Electronics Excellence Exam (SEE-2021) “Knockout the Lockdown Competition” conducted on 05/05/2021
- ❖ Prince Yona RLC of III MTRE attended in SOLIDWORKS program at Brahmastra Aerospace Systems from 06/05/2021 to 24/05/2021
- ❖ P. Siva of III MTRE participated in webinar on “Nano Fluids in Solar Energy: Applications and Challenges” organized by Department of Mechanical Engineering, Ramco Institute of Technology, Rajapalayam on 06/05/2021
- ❖ R.Ananth of II MTRE participated in webinar on “Nano Fluids in Solar Energy: Applications and Challenges” organized by Department of Mechanical Engineering, Ramco Institute of Technology, Rajapalayam on 06/05/2021
- ❖ M. Prithvirajan of II MTRE participated in International webinar on “Blockchain Technology” organized by Department of Mechanical Engineering, Wollo University – KioT, Ethiopia on 07/05/2021.
- ❖ P. R. Hari Raj, R. Devadharshini, P. Vikaash, D. Santhosh Elavarasan & J. Thirumalaiselva of II MTRE participated in workshop on “Applied Statistics for Data Science Techniques and Concepts” organized by IEEE Signal Processing Society in collaboration with AI Probably on 08/05/2021

- ❖ P. Siva of III MTRE participated in workshop on “Applied Statistics for Data Science Techniques and Concepts” organized by IEEE Signal Processing Society in collaboration with AI Probably on 08/05/2021
- ❖ J. Thirumalaiselva of II MTRE participated in webinar on “IoT (Home Automation)” organized by Robogenesis on 08/05/2021.
- ❖ J. Thirumalaiselva of II MTRE participated in webinar on “Advanced Industrial Automation” organized by Electrocus Solution on 09/05/2021
- ❖ P. Baskara Pandi of II MTRE completed online course on “Autodesk Certified Professional: AutoCAD for Design and Drafting Exam Prep” on 09/05/2021 conducted by Coursera.
- ❖ P. Siva of III MTRE participated in webinar on “CoST2021” organized by Corrosion Science and Technology Division Metallurgy and Materials Group, IGCAR & The Indian Institute of Metals (IIM) on 12/05/2021
- ❖ J. Thirumalaiselva & R. Devadharshini of II MTRE participated in “VOCABSTER” on 16/05/2021 organized by IEEE Signal Processing Society
- ❖ R. Devadharshini of II MTRE participated in online course “What is the future of 5G Technology” on 17/05/2021 organized by IT Sonix Solutions
- ❖ P. R. Hari Raj, M. Prithvirajan & A. Siva of II MTRE participated in webinar on “Concept of Traditional Design in Mechatronics” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 21/05/2021
- ❖ P. Siva of III MTRE participated in webinar on “Concept of Traditional Design in Mechatronics” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 21/05/2021
- ❖ P. R. Hari Raj, M. Prithvirajan & A. Siva of II MTRE participated in webinar on “Potential multifold of Additive Manufacturing in India with business case study” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 24/05/2021
- ❖ R. M. Anu Akshayaa of II MTRE participated in workshop on “Robotic Vision” organized by IEEE Robotic and Automation Society & Power Electronics Society of St. Joseph’s College of Engineering on 24/05/2021 & 25/05/2021.

- ❖ P. R. Hari Raj, M. Prithivirajan & A. Siva of II MTRE participated in webinar on “Foundation of Computational Fluid Dynamics” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 25/05/2021
- ❖ M. Prithivirajan of II MTRE participated in webinar on “Non-Destructive Testing for Industrial Application” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 25/05/2021
- ❖ R. Devadharshini of II MTRE completed online course on “Mobile and Web design & Prototyping from scratch” on 26/05/2021 conducted by Udemy
- ❖ P. R. Hari Raj & A. Siva of II MTRE participated in webinar on “Bio Fuels” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 26/05/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Advanced Engineering Materials” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 27/05/2021
- ❖ R. Devadharshini of II MTRE completed online course on “Blockchain Mastery 2021” on 27/05/2021 conducted by Udemy
- ❖ M. Prithivirajan of II MTRE participated in International webinar on “Technical Textiles” organized by Department of Mechanical Engineering, Wollo University – KioT, Ethiopia on 28/05/2021
- ❖ M. Prithivirajan of II MTRE participated in International webinar on “Computer Vision for Self-Driving Cars” organized by Department of Mechanical Engineering, Wollo University – KioT, Ethiopia on 07/05/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Recent Advances in Rolling Contact Bearing” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 29/05/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Role and impact of Entrepreneurship to Students” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 30/05/2021
- ❖ R. Devadharshini of II MTRE completed online course on “The Python programming A-Z Definitive Diploma in 2021” on 30/05/2021 conducted by Udemy.
- ❖ K. K. Sathya has completed internship program on “Email Marketing” from 16/05/2021 to 15/06/2021 at Exposys Data labs

- ❖ S. Sankara Narayanan, P. R. Hari Raj of II MTRE participated in webinar on “Aerodynamics of Automobile” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 01/06/2021.
- ❖ S. Sankara Narayanan of II MTRE participated in “Mathematical Software Workshop” organized by Universal Engineering College, Thrissur from 02/06/2021 to 06/06/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Light Weight Materials and Its Applications” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 02/06/2021.
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Composite materials in space applications and Collaborative robotic inspection” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 03/06/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Introduction to Industrial 4.0 & Industrial IoT” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 04/06/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Application of CAE in Mechanical and Automotive Engineering” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 05/06/2021
- ❖ S. Sankara Narayanan of II MTRE participated in “Soft Computing and Data Science” organized by ICFAI university, Jaipur from 01/05/2021 to 05/06/2021
- ❖ S. Sankara Narayanan of II MTRE participated in webinar on “Aerodynamics of Automobile” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 05/06/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Automotive Product Manufacturing Process & Its QMS Requirements” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 06/06/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Cognitive and personal Dimensions of Cyber Learning” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 07/06/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Nanomechanical Testing: Theory and Application” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 08/06/2021.



- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Convolution Neural Network for Image Classification” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 10/06/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Effective Communication for organizations Excellence” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 11/06/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Leadership Skills for Engineers” organized by Department of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam on 11/06/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Development of functionally graded material through directional solidification” organized by Department of Mechanical Engineering, R. R. institute of Technology, Bengaluru on 11/06/2021.
- ❖ P. R. Hari Raj of II MTRE participated in “Toycathon” organized by Department of Electronics and Communication Engineering, SCAD College of Engineering & Technology, Tirunelveli on 14/06/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Fused Deposition Modelling in 3D Printer” organized by Meck Teck Research Foundation, Pudukottai on 16/06/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Frequency Selective Surfaces and its Application” organized by Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore on 17/06/2021.
- ❖ M. Prithvirajan of II MTRE participated in webinar on “Space Odyssey – A Journey from Seashore to Red Planet” organized by Department of Mechanical Engineering, Ramco Institute of Technology, Rajapalayam on 19/06/2021
- ❖ M. Prithvirajan of II MTRE participated in International webinar on “Basics in Cyber Security” organized by Department of Mechanical Engineering, Wollo University – KioT, Ethiopia on 19/06/2021
- ❖ P. R. Hari Raj of II MTRE participated in webinar on “Environmental Testing of Underwater Weapon and Equipment” organized by Department of Mechanical Engineering, Thirumala Engineering College, Guntur on 19/06/2021.
- ❖ M. Prithvirajan of II MTRE participated in International webinar on “Leadership and Excellency in the Wake of COVID-19” organized by Department of Mechanical Engineering, Wollo University – KioT, Ethiopia on 26/06/2021

- ❖ P. R. Hari Raj of II MTRE participated in webinar on “How to become successful entrepreneur- A review for students Start-up” organized by Department of Mechanical Engineering, Vidyavardhaka College of Engineering, Mysuru on 26/06/2021.
- ❖ RLC. Prince Yona of III MTRE participated in Automotive Quiz organized by Manipal University, Jaipur conducted on 26/06/2021
- ❖ Final year Mechatronics Engineering student V. Tamilselvan has received best Cadet award and a cash prize of Rs 4,500/- from NCC directorate.
- ❖ P. Vikaash of III MTRE received certificate of recognition for his commitment and participation in the PALS student leadership program conducted by PALS in 2020-21.
- ❖ Prince Yona RLC of IV MTRE participated in “Dark Skies Quiz” organized by International Amateur Astronomical Association on 02/07/2021.
- ❖ Prince Yona RLC of IV MTRE participated in “Digital Detective” organized by NIT, Patna on 05/07/2021
- ❖ Prince Yona RLC of IV MTRE participated in “Codjuring” organized by NIT, Patna on 05/07/2021
- ❖ Devadharshini R and Anu Akshayaa RM of III MTRE participated in one day workshop on “Industrial Automation” organized by WARPE Academy on 11/07/2021
- ❖ Naveen Kumar V of III MTRE participated in one day workshop on “Advanced Driver Assistance System” organized by Skilled in SKYY Rider on 13/07/2021
- ❖ Devadharshini R of III MTRE participated in one day workshop on “Web Development” organized by WARPE Academy on 18/07/2021
- ❖ Devadharshini R of III MTRE participated in one day workshop on “Ethical Hacking” organized by WARPE Academy on 25/07/2021
- ❖ Prince Yona RLC of IV MTRE participated in “Solar Quiz” organized by Furenergy Grid on 25/07/2021
- ❖ Devadharshini R and Anu Akshayaa RM of III MTRE participated in three-day national level workshop on “MATLAB for beginners” organized by Department of Mathematics, Srimad Andavan Arts and Science College (Autonomous), Trichy from 28/07/2021 to 30/07/2021

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