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Jan - June 2023

NEWSLETTER
Electroblitz
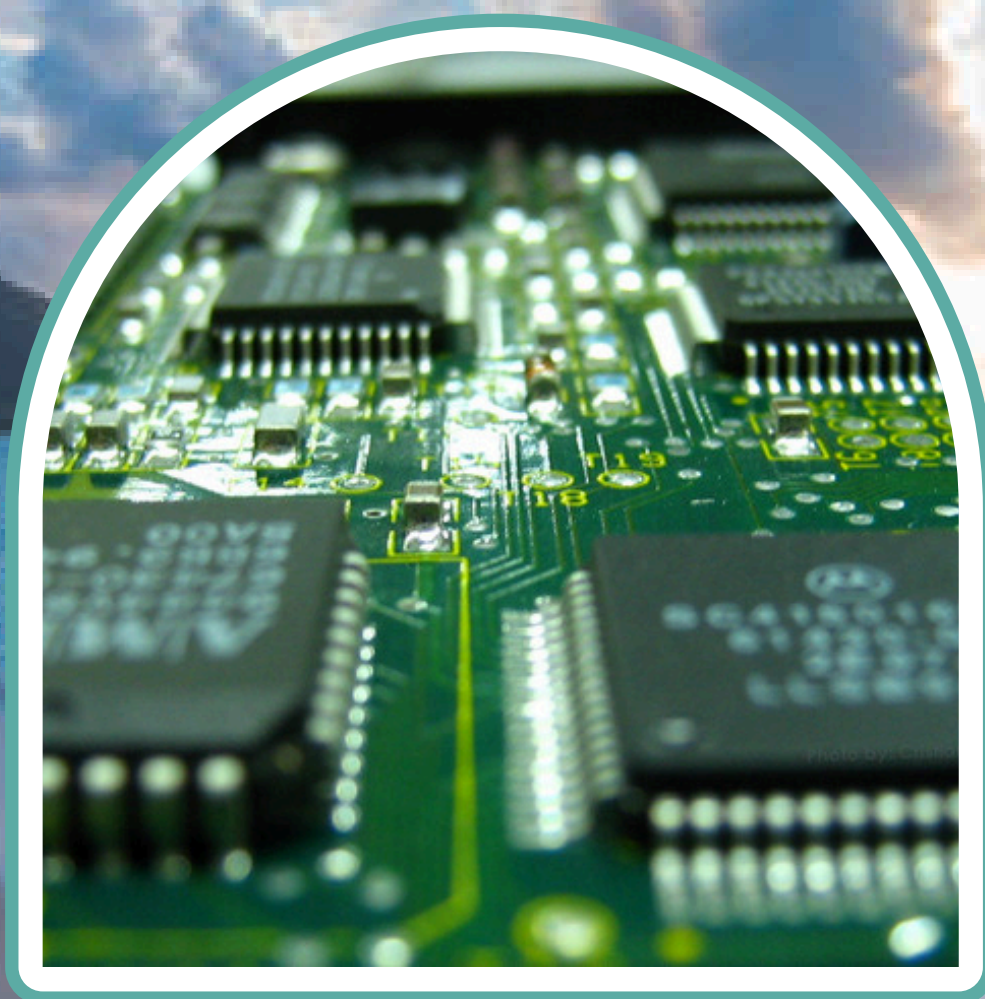
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

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TABLE OF CONTENTS

MESSAGES

PRINCIPAL MESSAGE

Dr.S.Manohanaran, M.E,Ph.D,FIE

It is a matter of great pride and satisfaction for JCT college of engineering to bring out the News Letter 'ELECTROBITZ' released from the Department of Electronics And Communication Engineering. The college has made tremendous progress in all areas academic, non-academics, capacity building relevant to staff and students. I am confident that this issue of Department News Letter will send a positive signal to the staff, students and the person who are interested in the Technical education and Technology based activities. A News Letter is like a mirror which reflects the clear picture of all sorts of activities undertaken by a Department and develops writing skills among students in particular and teaching faculty in general. I congratulate the editorial board of this News Letter who have played wonderful role in accomplishing the task in record time. I express my deep sense of gratitude to under whose guidance this Technical work has been undertaken and completed within the stipulated time. Also my heartfelt Congratulations to staff members and students for their fruitful effort.

HOD MESSAGE

Dr.V.J.ARULKARTHICK Ph.D

It gives me immense pleasure to note that response to this newsletter of our department "ELCTROBITZ" has been overwhelming. The wide spectrum of articles in different sections gives me a sense of pride that our students and professors possess creative potential and original thinking in ample measures. Each article is entertaining, interesting and absorbing. I applaud the contributors for their stimulated thoughts and varied hues in articles contributed by them. commendable job has also been done by the Editorial Board in planning for and producing the Newsletter. My congratulations to the team who took the responsibility for the arduous task most effectively. I am hopeful that this small piece of technical work shall not only develop the taste for reading among students but also develop a sense belonging to the institution as well.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

VISION

Electronics and Communication Engineering department aims to empower the budding engineers with technological excellence to meet current and imminent challenges in creative research and employment.

MISSION

1. To cater all necessary inputs to excel in elctronics knowledge both in theory and practical.
2. To develop leadership and entrepreneurship qualities with social and ethical values.
3. To provide the opportunities for innovation & collaborative research with industry and academia

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO 1: Graduates will have the potential to become globally competent team players and leaders in the allied fields of electronics and communication engineering.

PEO 2: Graduates will have the core technical skills and knowledge that will empower them to pursue lifelong learning and research

PEO 3: Graduates will deliver innovative solutions and services to address industrial and societal challenges, upholding ethical principles and social responsibility.

PROGRAM OUTCOMES (POS)

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, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3. 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.

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 professional 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 team work: Function effectively as an individual and as a member or leader in diverse teams, and in multidisciplinary settings.

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.

11. Project management and finance: Demonstrate knowledge and understanding of the engineering 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 lifelong learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Design, develop and analyze electronic systems through application of relev ant electronics, mathematics and engineering principles.

PSO2: Design, develop and analyze communication systems through application of fundamentals from communication principles, signal processing, and RF System Design & Electromagnetics.

EVENT ORGANIZED BY DEPARTMENTS

4

S.NO	EVENT	GUEST NAME	DATE
1	Seminar	Dr.SALINI.K	Feb 10th 2023
2	Seminar	Mrs.DHANYA.S .	Feb 25th 2023
3	Special Webinar	Shri.M.MUTHUKUMAR	Feb 25th 2023
4	Special Webinar	Mr.JAM SURESH	April 21st 2023
5	Technical Symposium	Dr.S.MANOHARAN	April 27th 2023

1.SEMINAR

Department of ECE and IETE organized seminar on 10.02.2023.The Resource Person: Dr.Salini. K post-doctoral research fellow, University of Sydney, Australia. The session was titled as: "Advances in quantum computing". Resource has discussed the basics of quantum computing, with the help of presentation slides and how we have moved from classic computers to quantum computers. Quantum computing focuses on the principles of quantum theory, which deals with modern physics that explain the behaviour of matter and energy of an atomic and subatomic level. Quantum computing makes use of quantum phenomena, such as quantum bits, superposition, and entanglement to perform data operations.While stating the benefits of quantum computing on one hand, she also cautioned the students on the other, against its ill effects. She emphatically stressed on the importance of automation-industry and how it will reduce the job opportunities of humans in the due course oftime. She advised the students to develop an acute curiosity to comprehend the gaps in the real world and see how they can fill the gaps by their innovative ideas and projects. Totally 60 students attended in his Program.

2. SEMINAR

Department of Electronics and Communication Engineering and ISTE team organized seminar and the Resource Person Ms.Dhanya.N, IT analyst, TCS Bangalore. Expert talk conducted on 25.02.2023 about "SCOPE and OPPORTUNITIES" She gave talk about what are the scope and opportunities there after their graduation.Guest spoke about Engineering is a highly specialized field that prepares graduates to use science, maths, and technology to create solutions for real-world problems. However, engineering graduates are often faced with the challenge of navigating the job market and deciding on a career path that suits their interests and strengths. In this expert talk, she discussed the scope and opportunities available to engineering graduates after completing their degree.Finally 58 students attended this program.

3. SPECIAL WEBINAR

Department of ECE and IETE team conducted webinar on 25.02.23. The Resource Person Shri.M.Muthukumar, DGM, Ground Control Systems,Airborne Platform and systems -BU,TATA Advanced Systems Limited(TASL),Bengaluru.Chief Guest delivered his lecture on the topic "Process of Innovation Development and Technology Readiness Level (TRL) And Commercialization of Lab Technologies and Technology Transfer".The webinar covered a range of topics related to drones including their history, technology with illustration using Drone Technology and various applications. He discussed various types of drones including Quadcopters,Hexacopters and Unmanned Aerial Vehicle.

4. SPECIAL WEBINAR

Department of ECE and IEEE conducted workshop. The Resource Person Mr.J.Sam Suresh, Yemi Foundation, Kangeyam. Chief Guest delivered his lecture on the topic "MATLAB – It's Applications & Latest Research in Real Life". The main objective of the webinar was to provide students with overview of MATLAB applications in real-life scenarios as well as to discuss the latest research in this field. He explained about various areas where the MATLAB is widely used such as Signal Processing, Control System, Image and Video processing. He demonstrated this feature with examples of plots and animations that showcased MATLAB's power and flexibility. He also discussed about the applications of MATLAB such as Data Analysis and Predictive maintenance in real life scenarios where MATLAB has been used to solve complex problems.

MATLAB Webinar

Friday, 21 April, 2023
14:25:47.676
RVPH+FPV Pichanur Tamil Nadu
641105 India
10°84'N 76°88'E
148.0m Altitude

Pichanur, Tamil Nadu, India
RVPH+FPV, Pichanur, Tamil Nadu 641105, India
Lat 10.836257°
Long 76.879171°
21/04/23 02:42 PM GMT +05:30

GPS Map Camera
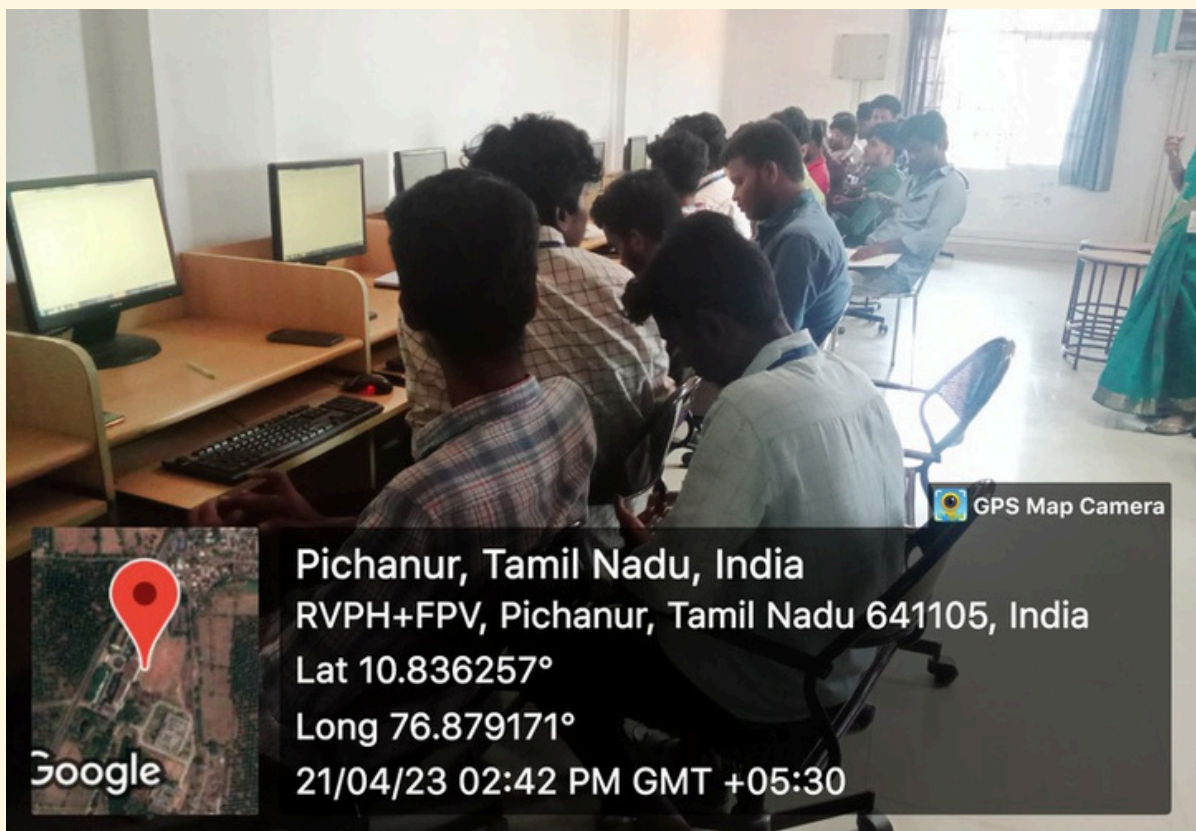
5. TECHNICAL SYMPOSIUM
" JFINAGLES"
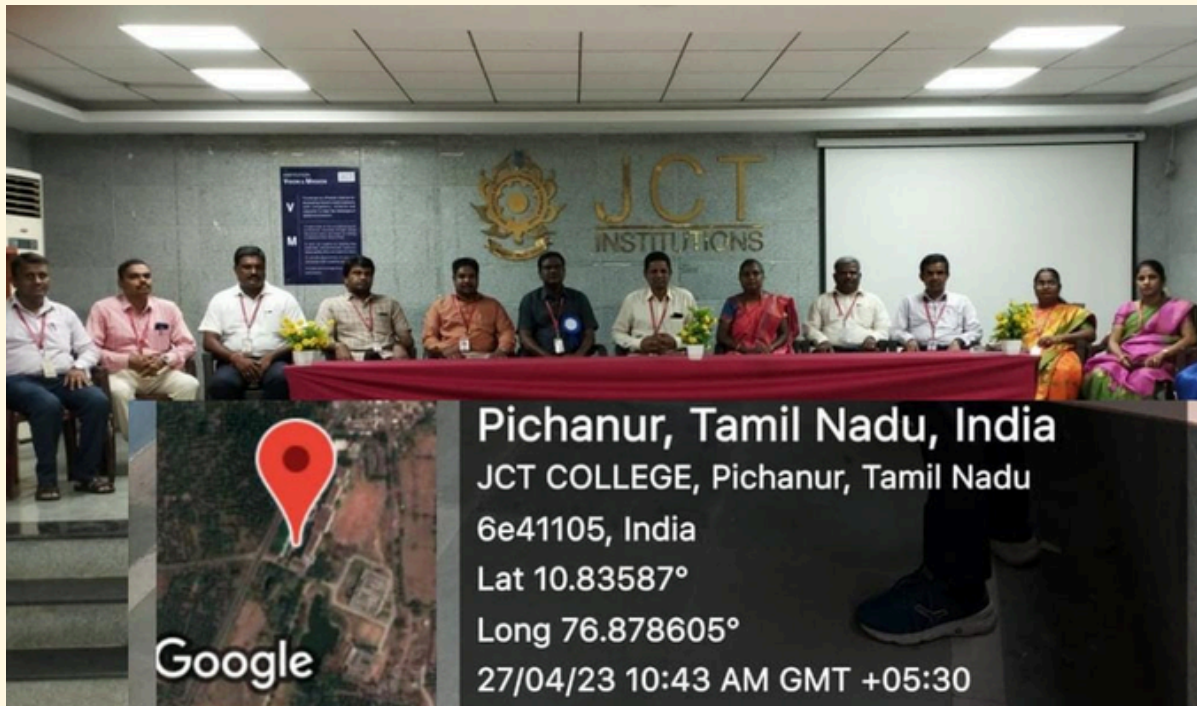
The Participants next participated in various events conducted by department of ECE.Many Students from various collegesparticipated in the various technicalevents. The first event was Paper presentation , followed by Prototype Exposition and Technical Quiz conducted.A symposium usually is a little less formal than a conference, since the objective is to spark more conversation. They often present the field experts in a panel discussion format, to help with recommendations from other experts or even people in the public about the topic in question.

PAPER PRESENTATION
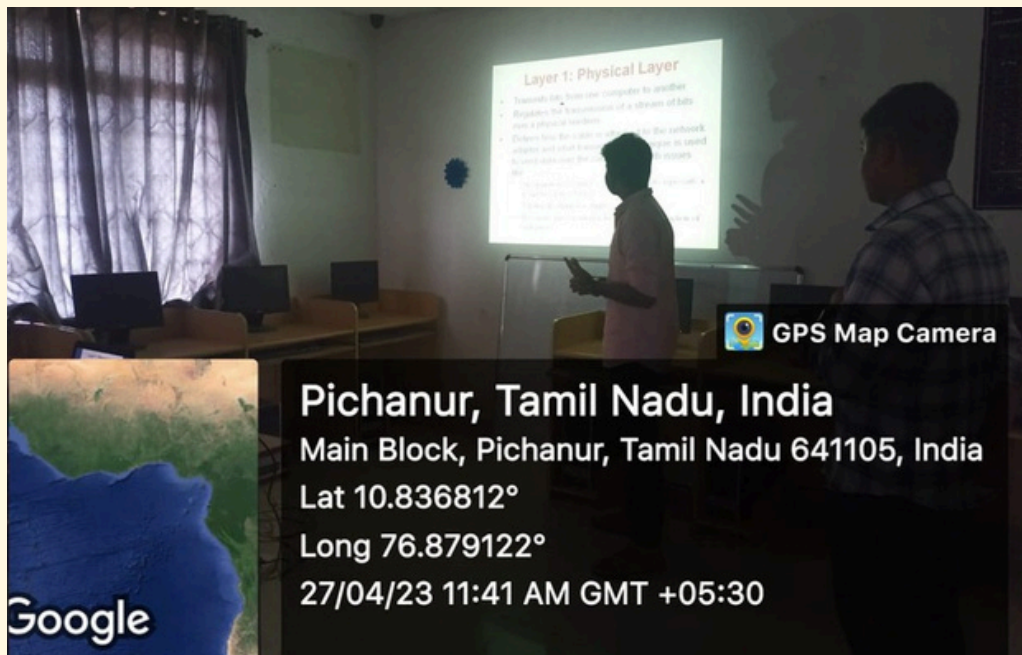
Paper presentation is a competitive event that involves individual participants creating an English essay on a specific theme and delivering it alongside a PowerPoint presentation to a panel of judges. the main Purpose. Presenting a paper entails sharing research findings and ideas with an audience, often at conferences or seminars. The primary goal is to disseminate knowledge, receive feedback, and engage in scholarly discussions.so many students participating and showing their presentation skill and developing the communication skill. various innovative topics they had and presenting with the advanced ideas. Totally 16 batches participated

PROJECT PRESENTATION

The students was next participated in the event of Project Presentation.A project presentation is an opportunity for ytheir to explain your project processes and deliverables to key stakeholders. These can be informal, like a quick update via reports with a few individuals. Many students was participated in this event with the innovative projects and they are explained clearly to the Banel members and other students. all students made innovative projects and 12batched participated in this project presentation.

QUIZ

Following that next event started and all the students are eagirly participating the quiz event and answering all the questions with that so many fun events organized for the students.After that a non-technical event "Insta-Reels" was conducted. Around 50 students from various Engineering colleges participated in the events. Finally, prizes were distributed to the winners during the valedictory function.

FACULTY ACHIEVEMENTS

S.NO	FACULTY NAME	NPTEL COURSE	STATUS
1	Mrs.D.VEDHA VINODHA	PRINCIPLE OF MANAGEMENT	ELITE
2	Mrs.S.MOHANA PRIYA	INTRODUCTION TO MACHINE LEARNING	ELITE

S.NO	FACULTY NAME	FDP TITLE	DATE
1	Mrs.D.VEDHA VINODHA	VLSI & CHIP DESIGN	JULY 10th to 14th 2023
2	Mrs.D.VEDHA VINODHA	BIO MEDICAL SENSORS AND SIGNAL PROCESSING	JAN 9th to 13th 2023
3	Mr. PRAVEEN KUMAR	RECENT ADVANCEMENT IN AI AND IoT	JAN 2nd to 6th 2023
4	Mrs.S.MOHANAPRIYA	INTEGRAED ARTIFICIAL INTELLIGENCE DATA SCIENCE	MARCH 6th TO 10th 2023
5	Mrs.THAHSEEN THAHIR	VLSI & CHIP DESIGN	JULY 10th to 14th 2023
6	Mr.CHANDRA SEKARAN	INTEGRAED ARTIFICIAL INTELLIGENCE DATA SCIENCE	MARCH 6th to 10th 2023

13

7	Mr.K.BABU	BIO MEDICAL SENSORS & SIGNAL PROCESSING	JAN 9th to 13th 2023
8	Mr. PRAVEEN KUMAR	CHALLENGES AND NEW TRENDS IN POWER ELECTRONICS	FEB 13th to 17th 2023
9	Mrs.R.POORNIMA	ACADEMIC INTEGRITY AND DEALING PLAGIARISM	FEB 7th to 13th 2023
10	Ms.A.SINDHU	ACADEMIC INTEGRITY AND DEALING PLAGIARISM	FEB 7th to 13th 2023

STUDENT ACHIEVEMENT
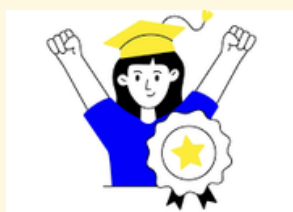
S .NO	STUDENT NAME	COURSE NAME
1	REDDYGARI CHETHANA	PROGRAMMING IN C++
2	GADDAM MANISHA	PROGRAMMING IN C++
3	SHAIK NAFIYA TABASUM	PYTHON PROGRAMMING

EXTERNAL PARTICIPATION

S.NO	STUDENT NAME	EVENT NAME
1	REDDYGARI CHETHANA	NATIONAL LEVEL TECHNO CULTURAL FEST AT RATHINAM COLLEGE

2	GADDAM MANISHA	NATIONAL LEVEL TECHNO CULTURAL FEST AT RATHINAM COLLEGE
3	SHAIK NAFIYA TABASUM	NATIONAL LEVEL TECHNO CULTURAL FEST AT RATHINAM COLLEGE
4	DHINESH	NATIONAL LEVEL TECHNO CULTURAL FEST AT RATHINAM COLLEGE
5	PORULCHELVAN	NATIONAL LEVEL TECHNO CULTURAL FEST AT RATHINAM COLLEGE
6		NATIONAL LEVEL TECHNO CULTURAL FEST AT RATHINAM COLLEGE
7	LOKESH	NATIONAL LEVEL TECHNO CULTURAL FEST AT RATHINAM COLLEGE

TOPPERS Classes

S.NO	NAME OF THE STUDENT	YEAR	POSITION
1	FENISHA PRINCESS	IV year	Ist Rank
2	RAJASUBHIKSHA	IV year	IInd Rank
3	SARANRAJ	IV year	IIIrd Rank
4	SATHISHKUMAR.T	IIIrd year	Ist Rank
5	GADDAM MANISHA	IInd year	Ist Rank
6	NUNE KOTESWAR RAO	IInd year	IInd Rank

1	18.4.23	REDDYGARI CHETHANA IIECE	Paperpresentation - ECLATZA-23	HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE	Runner
2	18.4.23	SANJAY.K II ECE	Circuit debugging-ECLATZA-23	HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE	Certificate of Participation
3	18.4.23	SANJAY.K II ECE	Technicalquiz-ECLATZA-23	HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE	Certificateof Participation
4	18.4.23	SANJAY.K II ECE	Fun game-ECLATZA-23	HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE	Winner
5	18.4.23	DINESH.M II ECE	Paper presentation-ECLATZA-23	HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE	Runner
6	18.4.23	LOKESH..M II ECE	Technicalquiz-ECLATZA-23	HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE	Certificate of Participation
7	18.4.23	LOKESH..M II ECE	Circuitdebugging-ECLATZA-23	HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE	Certificate of Participation

7	18.4.23	LOKESH..M II ECE	Circuitdebugging-ECLATZA-23	HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE	Certificateof Participation
8	18.4.23	LOKESH..M II ECE	Fun game-ECLATZA-23	HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE	Certificate of Participation
9	.3.2023& 31.3.2023.	SHAIK NAFIYA TABASUM IIECE	Preserving Tamil Arts - NATIONAL LEVEL TECHNO CULTURAL FEST 2023	HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE	Certificate of Participation
10	30.3.2023& 31.3.2023.	GADDAM MANISHA IIECE	Preserving Tamil Arts - NATIONAL LEVEL TECHNO CULTURAL FEST 2023	RATHINAMTECHNI CALCAMPUS, COIMBATORE	Certificate of Participation
11	30.3.2023& 31.3.2023.	GADDAM MANISHA IIECE	Paper presentation NATIONAL LEVEL TECHNO CULTURAL FEST 2023	RATHINAMTECHNI CALCAMPUS, COIMBATORE	Second prize
12	30.3.2023& 31.3.2023.	REDDYGARI CHETHANA IIECE	Preserving Tamil Arts - NATIONAL LEVEL TECHNO CULTURAL FEST 2023	RATHINAMTECHNI CALCAMPUS, COIMBATORE	Certificate of Participation
13	30.3.2023& 31.3.2023.	REDDYGARI CHETHANA IIECE	Paper presentation - NATIONAL LEVEL TECHNO CULTURAL FEST 2023	RATHINAMTECHNI CALCAMPUS, COIMBATORE	Second prize

13	30.3.2023 & 31.3.2023.	REDDYGARI CHETHANA IIECE	Paper presentation - NATIONAL LEVEL TECHNO CULTURAL FEST 2023	RATHINAMTECHNIC ALCAMPUS, COIMBATORE	Second prize
14	23.3.23	DHANUJNAI.N .A II ECE	IPLAUCTION I-SYM23	HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE	Third Prize
15	20.3.23	SHAIKNAFIYA TABASUM IIECE	National IntellectualProperty AwarenessMission	INTELLECTUALPRO PERTY OFFICE, INDIA	Certificate of Participation
16	19.02.23	REDDYGARI CHETHANA IIECE	Dr,APJABDUL KALAMSATELLITE LAUNCH VEHICLE MISSION 2023	Dr,APJ ABDUL KALAM INTERNATIONALFO UNDATION, RAMESHWARAM	Certificate of Participation
17	19.02.23	DHIWAKAR.S II ECE	Dr,APJABDUL KALAMSATELLITE LAUNCH VEHICLE MISSION 2023	Dr,APJ ABDUL KALAM INTERNATIONALFO UNDATION, RAMESHWARAM	Certificate of Participation
18	22.2.23 & 23.2.23	JISHNU.S II ECE	SHUTTLE-SINGLE CHAKRA23	RATHINAM COLLEGE OF ARTS AND SCIENCE, COIMBATORE	Certificateof Participation

S.NO	Title	Nameofthe Students	Name of the Event	Nameofthe Organizing Institution/ Publication
1	The Joy of Computing using Python	ARUN M	NPTEL	SWAYAM

2	The Joy of Computing using Python	VARUN N	NPTEL	SWAYAM

S.NO	NAME OF THE STUDENTS	TITLE OF THE PROJECT	NAME OF THE ORGANIZING /INSTITUTION PUBLICATION
1	MALAVIKA.K.P IV ECE	MULTIPURPOSESOLARPOWERED UMBRELLA INTEGRATED WITH COOLING FAN AND POWER BANK	IES COLLEGE OF ENGINEERING, THRISSUR
2	SARANRAJ.S IV ECE	MULTIPURPOSESOLARPOWERED UMBRELLA INTEGRATED WITH COOLING FAN AND POWER BANK	IES COLLEGE OF ENGINEERING, THRISSUR
3	PRAVEENKUMAR. K IVECE	MULTIPURPOSESOLARPOWERED UMBRELLA INTEGRATED WITH COOLING FAN AND POWER BANK	IES COLLEGE OF ENGINEERING, THRISSUR

S.NO	COMPANY NAME	DATEOF VISIT	IMPACT ANALYSIS
1	NANDHINI DAIRY PVT LTD	23.03.2023	EXPOSURE OF INDUSTRIAL AUTOMATIOIN DAIRY PLANT
2	CEREBRON TECHNOLABZ	14.03.2023 TO 16.03.2023	EXPOSURE TO THE EMBEDDED SYSTEM DEVELOPMENT

S.NO	TITLE OF THE COURSE	COLLABORATIVE AGENCY
1	NETWORK ESSENTIALS	CISCO
2	ROBOTIC PROCESS AND AUTOMATION	UIPATH
3	BLOCKCHAIN	NSC ACADEMY
4	DIGITALMARKETING	NSC ACADEMY
5	PROFESSIONAL READINESS ARTIFICIALINTELLIGENCE	IBM
6	NETWORK ENGINEERING	CISCO

S.NO	DATE	NAME OF THE COMPANY
1	19-04-2023	PUMOTECHNOVATION

BEST OUTGOING STUDENT
21

FENISHA PRINCESS
2019 - 2023

GROUP PHOTO

FINAL YEAR (2019-2023) BATCH

CONNECT WITH US!

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