**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING** 

# NELLETTER

2021-2022





# RAM ENGINEERING COLLEGE

An Autonomous Institution | Affiliated to Anna University & Approved by AICTE, New Delhi Accredited by NBA and NAAC "A+" | An ISO 9001:2015 Certified and MHRD NIRF ranked institution

Sai Leo Nagar, West Tambaram, Chennai - 600 044. www.sairam.edu.in





















# Imagine the Future and Make it happen!









































































Together let's build a better world where there is NO POVERTY and ZERO HUNGER.

We have GOOD HEALTH AND WELL BEING QUALITY EDUCATION and full GENDER EQUALITY everywhere.

There is **CLEAN WATER AND SANITATION** for everyone. **AFFORDABLE AND CLEAN ENERGY** 

which will help to create DECENT WORK AND ECONOMIC GROWTH. Our prosperity shall be fuelled

by investments in INDUSTRY, INNOVATION AND INFRASTRUCTURE that will help us to

REDUCE INEQUALITIES by all means. We will live in SUSTAINABLE CITIES AND COMMUNITIES.

RESPONSIBLE CONSUMPTION AND PRODUCTION will help in healing our planet.

**CLIMATE ACTION** will reduce global warming and we will have abundant,

flourishing LIFE BELOW WATER, rich and diverse LIFE ON LAND.

We will enjoy PEACE AND JUSTICE through STRONG INSTITUTIONS

and will build long term PARTNERSHIPS FOR THE GOALS.



For the goals to be reached, everyone needs to do their part: governments, the private sector, civil society and **People like you.** 

Together we can...



# **VISION**

To emerge as a "centre of excellence" in the field of Electronics and Communication Engineering and to mould our students to become technically and ethically strong to meet the global challenges. The Students in turn contribute to the advancement and welfare of the society.



#### **MISSION**

Department of Electronics and Communication Engineering, SRI SAIRAM ENGINEERING COLLEGE is committed to

- **M1** Achieve, sustain and foster excellence in the field of Electronics and Communication Engineering.
- **M2** Adopt proper pedagogical methods to maximize the knowledge transfer.
- **M3** Enhance the understanding of theoretical concepts through professional society activities
- M4 Improve the infrastructure and provide conducive environment of learning and research following ethical and moral values

#### PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- **PEO1** Acquire strong foundation in Engineering, Science and Technology for a successful career in Electronics and Communication Engineering.
- **PEO2** Apply their knowledge and skills acquired to solve the issues in real world Electronics and Communication sectors and to develop feasible and viable systems.
- **PEO3** Be receptive to new technologies and attain professional competence through professional society activities.
- **PEO4** Participate in lifelong learning, higher education efforts to emerge as expert researchers and technologists.
- **PEO5** Practice the profession with ethics, integrity, leadership and social responsibilities.

#### **PROGRAM SPECIFIC OUTCOMES (PSOs)**

- **PSO 1** Design, implement and test Electronics and Communication systems using analytical knowledge and applying modern hardware and software tools
- **PSO2** Develop their skills to solve problems and assess social, environmental issues with ethics and manage different projects in multidisciplinary areas.

### PROGRAMME OUTCOMES(POs)

PROGRAM OUTCOME REPRESENTS THE KNOWLEDGE, SKILLS AND ATTITUDES THAT THE STUDENTS WOULD BE EXPECTED TO HAVE AT THE END OF THE 4 YEAR ENGINEERING DEGREE PROGRAM

# 12

## Life-long learning

Recognize the need for, and have the preparation, ability to engage in independent and life-long learning in the context of technological change.

### 01

### **Engineering knowledge**

Apply the basic principle and knowledge of mathematics, science and engineering principles to solve technical problems.

CHIEFRING DECEMBER

POGRAM OUTCOME

### 0)2

#### Problem Analysis

Identify and analyze complex engineering problems reaching logical conclusions using the basic principles of mathematics, science and engineering.

# 11

### Project management

Demonstrate knowledge and apply the principles of engineering & management in their own / team projects in multidisciplinary environments.

### 10

### Communicate effectively

Communicate effectively amongst the engineering community, being able to comprehend & write effective reports, make presentations & give/receive clear instructions.

# 09

### Individual & Teamwork

Function effectively as an individual, and as a member or leader in diverse teams, and in multi-disciplinary professional settings.

### 08

### Apply ethical principles

Apply ethical principles and commit to professional ethics and responsibilities based on the norms of professional engineering pratices.

### (0)

### **Environment & Sustainability**

Demonstrate professional skills, knowledge and contextual reasoning to assess / environmental / societal issues for sustainable development.



### Development of solutions

Design solutions for well-defined technical problems and assist with the design of systems, components or processes to meet specified needs.

### Investigate complex problems

Perform investigations, use research based knowledge and conduct experiments, analyze and interpret the results to provide valid conclusions.

### 05

#### Modern tool usage

Create, select and apply the latest techniques, resources and modern engineering / IT tools to develop appropriate solutions with an understanding of the limitations.

## The Engineer and Society

Apply reasoning based on contextual knowledge to assess societal, legal and cultural issues with competency in professional engineering practices.



#### Value added Training Programme on "Embedded Protocol Developer"

The Association of ECE, IETE Student branch, IEEE & IEI Organized 3 day Value Added Training Programme on "Embedded Protocol Developer" from 29.09.2021 to 01.09.2021. Hands-on training provided by Mr. Don Deodus, Senior Embedded Developer, Throttle Innovations Private Limited, Chennai. 42 students attended the training program and benefitted. At the end of the day students completed the various projects. The Training program facilitates the students to excel in the emerging fields.

#### **Workshop on Orcad PSPICE Using Cadence**"

The Association of ECE, IEEE & IEI,IETE Student Forum in Association with Live wire, Chennai conducted a 2 days workshop on "ORCAD PSPICE EDITOR" on 17.09.2021 & 18.09.2021 for second year students. During the Training program students were taught PCB Design & Simulation analog circuits using cadence. Participants shared their experience. More than 190 students participated and benefited.





#### Workshop on "Current Trends in Artificial Intelligence"

The Association of ECE Department, IETE Student branch, IEEE & IEI Organized, workshop on "Current Trends in Artificial Intelligence". Mr. Sumit Singh Chauhan, Senior Data Scientist, Entropik Tech, Bengaluru. Inaugurated & speaker gave lecture on the topic State of Artificial Intelligence and Emotion AI.

# International webinar series "Project Management in Process Automation"

The Association of ECE, IETE Student branch, IEEE & IEI Organized International webinar series "Project Management in Process Automation". Resource person Mr. Sankar Pillai, Director, Projects, Emerson Asia Pacific Private Ltd., Singapore. The speaker elaborated on Project management techniques and process Automation in detail.120 Students attended the webinar.





#### **Webinar on Higher Studies**

The Association of ECE, IETE Student branch, IEEE & IEI **Organized a Webinar on higher studies.** Speakers were **Mr. Sabari Jay,** Manya

Princeton review, Chennai, explained about the Higher studies opportunities in abroad, top ten universities and scholarships provided.190 students attended the webinar.

#### **Webinar on Skillrack Awareness programme**

The Association of ECE, IETE Student branch, IEEE & IEI Organized webinar on Skill rack awareness programme on 23.08.2021. Speakers were Mr. K.Barathwaj Software Engineer, CISCO Systems, Ms.V. Manisha, Systems Engineer, TCs & Ms.Anuja T.S.R. The speakers explained about Skill rack and training, they explained about how skill rack helped them for placement opportunities. Total 190 Students attended the webinar.



#### Webinar on Skillrack Awareness programme



The Association of ECE, IETE Student branch, IEEE & IEI Organized webinar on Skill rack awareness programme on 25.09.2021. Speakers were Mr.V.Karthik Raja Software Engineer, Application Development Engineer, Systems, Ms.V.Manisha, Systems Engineer, TCs & Mr Shivakumar, ZOHO, and Software Developer. The speakers explained about skill rack and training, they also explained about how skill rack helped them for placement opportunities. Total 165 Students attended the webinar.

#### **IETE FOUNDATION DAY CELEBRATION ON 02.11.2021**

The Department of Electronics and Communication Engineering **celebrated the IETE foundation day** on 02.11.2021 on campus. The event was conducted at the Beta hall with 100 participants from 2nd year and 3rd year. Welcome address by **Dr S Sumathi**, professor, ECE and ISF Coordinator. Dr S Sumathi briefed on the various activities such as Quiz competition, sell your product and Adzab conducted and acknowledgements received throughout the year.





#### Value added Training Programme on "Internet of Things"

The Association of ECE, IETE Student branch, IEEE & IEI Organized Labs a 3 day Value Added Training Programme on "Internet of Things" from 11.10.2021 to 13.10.2021. Students were provided with hands-on training by Mr. Parthiban, Team Lead from LEMA Labs, IIT Research Centre, Chennai. Students benefited by completing IoT based projects. The Training program facilitates the students to excel in the emerging fields.

#### Seminar on "Critical Thinking and Innovation" on 20.12.2021

The Association of ECE, IETE Student branch, IEEE & IEI Organized Seminar on Critical Thinking and Innovation on 20.12.2021. Resource person Dr C.R.Rene Robin, Dean Innovation, Sri Sairam Engineering College, Chennai, delivered talk about critical thinking and innovation for problem solving, developing Projects and business model.





#### Workshop on "Tinkercad"

The Association of ECE, IETE Student branch, IEEE & IEI **Organized** workshop on **Tinker cad** 19.12.2021. The workshop facilitates the students to excel in using Tinkercad for simulation.

# Value added Training Programme on "Smart Phone Servicing and Troubleshooting"

The Association of ECE, IETE Student branch, IEEE & IEI with NEW TECHNOLOGY, Smart phone servicing Institute, Coimbatore. Conducted Value added Training Programme on "Smart Phone Servicing and Troubleshooting from 23.3.2022 & 24.3.2022. Students were given handson training in Common repair procedure for hardware related faults, software related faults & Water damaged repair techniques.





#### Seminar on "Strategies for Facing Questions in Technical Recruitment Exams

The Association of ECE, IETE Student branch, IEEE & IEI Organized a Seminar on Strategies for Facing Questions in Technical Recruitment Exams on 16.03.2022.Resource person our Alumni speaker Mr.S.Venkatraman, Assistant Professor, Department of ECE, Sri Sairam Institute of Technology, Chennai. The students were able to gain knowledge about the Technical Recruitments exams.

#### World Telecommunication Day celebration on 17.05.2022

The Association of ECE, IETE Student branch, IEEE & IEI celebrated the IETE World Telecommunication day on 17.05.2022 at Gamma hall with 125 participants from II year and III year ECE. A Letter from the IETE head office was read, stating the importance of communication and declaring "Theme for the year Digital Technologies for Older Persons and Healthy Ageing". The theme emphasizes the use of information technologies and their importance to stay healthy, connected, and independent on a physical, emotional, and financial level. Chief Guest, Mr S Arunsundar, Systems Engineer, CVRDE, DRDO EC member IETE Chennai centre. The Chief guest elaborated on the "IoT systems and its architecture", followed by interactive speech, QUIZ, CIRCUIT JUMBLE & SURPRISE events were conducted by the student organizers.





#### Mini Project Exhibition held on 31.05.2022

The Association of ECE, IETE Student branch, IEEE & IEI Organized Techxhibit 2k22. A **Mini Project Exhibition** on 31.05.2022. Third year ECE Students with innovative projects on Recent Technology participated in the competition. Prizes were distributed for the best projects.

#### Faculty Development Programme held on 7.6.21 to 12.6.21

The Department of Electronics and Communication Engineering, Organized Six days Online Faculty development Programme, sponsored by Center for Faculty Development, Anna University, on CS8082 - Machine Learning Techniques from 07 June 2021 to 12 June 2021. The coordinators for the FDTP were Ms. A. R. Rajini and Ms. K. Subhashini. The FDTP was organized as per the guidelines stated by CFD, Anna University.



### STUDENTS ACHIEVEMENTS



### **OUTER SPACE INDIA!**

Team OUTER SPACE of Sri Sairam Engineering College, K. L. Nirmal Raja, K. Varunapriyan, S. Thanush of 3rd YR ECE are extremely proud to reveal them officially as NASA's - IASC CITIZEN SCIENTISTS!

In the CB Devgun Memorial Asteroid Search Campaign partnered with NASA, they got the opportunity to be citizen scientists recognized by NASA - National Aeronautics and Space Administration, where out of all the 44 asteroids that were detected in this campaign, **the team**Outer Space detected around 7 asteroids with the datasets that received from PAN-STARRS



### **FAER - McAfee**

M. Shyamkumar, K. L. Nirmal Raja, K. Varunapriyan of 3rd Year ECE won II prize with a cash award of rs 75000/- for their proposal titled "Control of Prosthetic Arm via Signals from Residual Limb – A Boon for Amputees" from FAER – McAfee.

### STUDENTS ACHIEVEMENTS

### **HACKATHON & POSTER DESIGN CONTEST - IIT MADRAS**



Third year Students Tata Sai Nandini and S. Swethaa have participated in the Student Hackathon and Student Poster Design contest at IIT Madras.

They have won Second place in Student Hackathon,

Cash Prize rs 15000.00 & also received Consolation Prize in Student Poster Design, Cash Prize rs 25000.00





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