



VISION OF INSTITUTION

*To be among the Top 20
Private Engineering
Institutes in India by 2020*

MISSION OF INSTITUTION

M1: Design and implement a curriculum that equips students with professional and life skills.

M2: Recruit, develop and retain outstanding faculty to achieve academic excellence.

M3: Promote and undertake quality research in thrust areas of science and technology.

M4: Collaborate with industry and academia to meet the changing needs of society.

M5: Foster innovation and cultivate the spirit of entrepreneurship among students.

Vision of the ECE Department

To academically outstand in the field of Electronics and Communication Engineering education.

Mission of the ECE Department:

M1: Build Electronics and Communication Engineering knowledge in students by implementing novel educational experiences.

M2: Develop effective instructional infrastructural resources.

M3: Develop Technology Entrepreneurship skills through interdisciplinary learning.

M4: Develop community through service, consulting and research activities.



PEO of the ECE Department:

The Electronics and Communication Engineering graduates from S R Engineering College, Warangal are expected to:

PEO1: Create innovative products in the field of Electronics and Communication Engineering.

PEO2: Pursue higher education or professional development courses for life-long learning.

PEO3: Develop entrepreneurial mindset among students and support community building.



Editorial Board:

Chief Editor :
Dr. J. Tarun Kumar

Staff Members :
Mr. K. Sreedhar Reddy,
Mr. P. Ramchandar Rao,
Mr. Y. Srikanth

Student Members :
Ms. P. Shivani,
Mr. E. Sandeep.



Table of Contents:

Profile of ECE Department	2
Program Outcomes	3
Program Specific Outcomes	4
Activities of the department	4
Faculty Publications	4
Placement details	5
Workshop /FDPs/Training attended	6
Photographs of various activities	6

Profile of ECE Department

- ❖ Department of Electronics and Communication Engineering (ECE) was started in the year 2002. The department offers 4 years under graduate (UG) program in B. Tech ECE and 2 years post graduate (PG) program in M. Tech Embedded Systems and Electronics Design Technology. The current student intake for UG program is 180 and PG program is 54.
- ❖ The department has experienced, qualified, dedicated, and trained faculty with deep sense of commitment towards the students and institution. The department has well equipped and state of the art laboratories for both UG & PG programs. The department has its own vision and mission at par with the vision and mission of the institute.
- ❖ The department of ECE is accredited by NBA under Tier-I in 2018, New Delhi and NAAC Bengaluru.

Highlights of the department

- ❖ Faculty have published several research publications which are cited in Web of Science, Scopus, and Google scholar.
- ❖ Faculty have published several patents in their domain.
- ❖ Training for placement is offered in the department along with mock interviews by Alumni who are well placed.
- ❖ In the year 2018, the Center for Embedded Systems and Internet of Things lab was founded.
- ❖ We have been voted the Best Engineering College in town for ECE due to our excellent career chances and 100% placement rate.

Program Outcomes (POs):

- ❖ **PO1: 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, 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 public health and safety, and cultural, societal, and environmental considerations.
- ❖ **PO4: Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- ❖ **PO5: 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.
- ❖ **PO7: 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.
- ❖ **PO8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- ❖ **PO9: Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- ❖ **PO10: Communication:** Communicate effectively on complex engineering activities with the engineering community and with the 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.
- ❖ **PO11: 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.

Program Specific Outcomes (PSOs):

- ❖ **PSO's 01:** Apply mathematical foundations, electronic principles and computer fundamentals in the modeling and design of electronic-based systems in a way that demonstrates comprehension of the tradeoffs involving design choices.
- ❖ **PSO's 02:** Demonstrate ideas, methodologies with new cutting-edge technologies using system software for product development starting from the lowest level of physical devices to the top level of application development.

Activities of the department:

Programs Conducted:

- ✓ A Two Day Hackathon on “**The Internet of Things**” was organized by the Center for Embedded Systems & IoT and ECE Dept., from 13-03-2020 to 14-03-2020.

Faculty publications:

International/national journals:

- ✓ Sreedhar Kollem, Katta Ramalinga Reddy, and Duggirala Srinivasa Rao published a paper on “**Modified transform-based gamma correction for MRI tumor image denoising and segmentation by optimized Histon-based elephant herding algorithm**”, in the International Journal of Imaging Systems and Technology, Volume No.30, Issue No.3, Pages: 1271–1293, March 2020.
- ✓ Dr. J. Tarun Kumar published a paper on “**Novel Distance-Based Subcarrier Number Estimation Method for OFDM System**”, in the Lecture Notes in Electrical Engineering (Book chapter), Volume No.659, Issue No.2020, Pages: 1-10, March 2020.
- ✓ Dr. J. Tarun Kumar published a paper on “**A Novel Optimization Algorithm for Spectrum Sensing Parameters in Cognitive Radio System**”, in the Lecture Notes in Electrical Engineering (Book chapter), Volume No.659, Issue No.2020, Pages: 1-10, March 2020.
- ✓ V. Ravi published a paper on “**Image Enhancement on OpenCV based on the Tools: Python 2.7**”, in WAFFEN-UND KOSTUMKUNDE JOURNAL, Volume No.10, Issue No.5, Pages: 1-12, February 2020.
- ✓ Ch. Rajendra prasad published a paper on “**Smart Food Quality Testing and Ordering System Using at Mega328 in Restaurants**”, in the International Journal of Scientific Research and Engineering Development, Volume No.3, Issue No.1, Pages: 1-8, February 2020.
- ✓ Mrs. N. Shilpa published a paper on “**Structure and Implementation of Women Safety Framework Based on IoT Technology**”, in the Test engineering journal, Volume No.2020, Issue No.2020, Pages: 2214-2218, February 2020.

Patents published:

- ✓ Dr. LMI Leo Joseph, Dr. J. Ravichander, Mr. B. Girirajan, and Dr. J. Tarun Kumar got a patent entitled “**Pressure based self-power generating system**”.
- ✓ Mr. B. Girirajan, Dr. LMI Leo Joseph, and Dr. J. Ravichander got a patent entitled “**Retractable protective system**”.
- ✓ Mr. B. Girirajan, Dr. LMI Leo Joseph, and Dr. J. Ravichander got a patent entitled “**A soil monitoring, reporting and decision making device**”.
- ✓ Dr. LMI Leo Joseph, Dr. J. Ravichander, Mr. B. Girirajan, and Dr. J. Tarun Kumar got a patent entitled “**A system & method for food dispensing assistance**”.
- ✓ Dr. LMI Leo Joseph, Dr. J. Ravichander, Mr. B. Girirajan, and Dr. J. Tarun Kumar got a patent entitled “**An automatic medicine dispensing system and method**”.
- ✓ Mr. B. Girirajan, Dr. LMI Leo Joseph, and Dr. J. Ravichander got a patent entitled “**Multi-lingual workstation system**”.
- ✓ Dr. LMI Leo Joseph got a patent entitled “**A pond skimming device**”.
- ✓ Mr. A. Rajeshwar Rao got a patent entitled “**Electronic device battery indicator**”.
- ✓ Mr. A. Rajeshwar Rao got a patent entitled “**An automatic poor quality rejecter**”.
- ✓ Mr. A. Rajeshwar Rao got a patent entitled “**Traffic alert system**”.

Books published:

- ✓ Dr. V. Malathy published a book on “**Embedded Systems**” in the Charulatha Publications in 2020 January, ISBN no: 978-93-89736-13-7.
- ✓ Dr. V. Malathy published a book on “**Transmission Lines and Waveguides**” in the Charulatha Publications in 2020 January ISBN no: 978-93-89736-52-6.

Placement details:

The following are the placements taken place between January to December 2020

S.No.	Name of the Company	No. of Students Placed
1	CISCO	01
2	CTS	15
3	DXC	27
4	Hexaware	01
5	ICCS	05
6	Infosys	14
7	NTT data	01
8	TCS Ninja	12
9	Tvarana software solutions	01

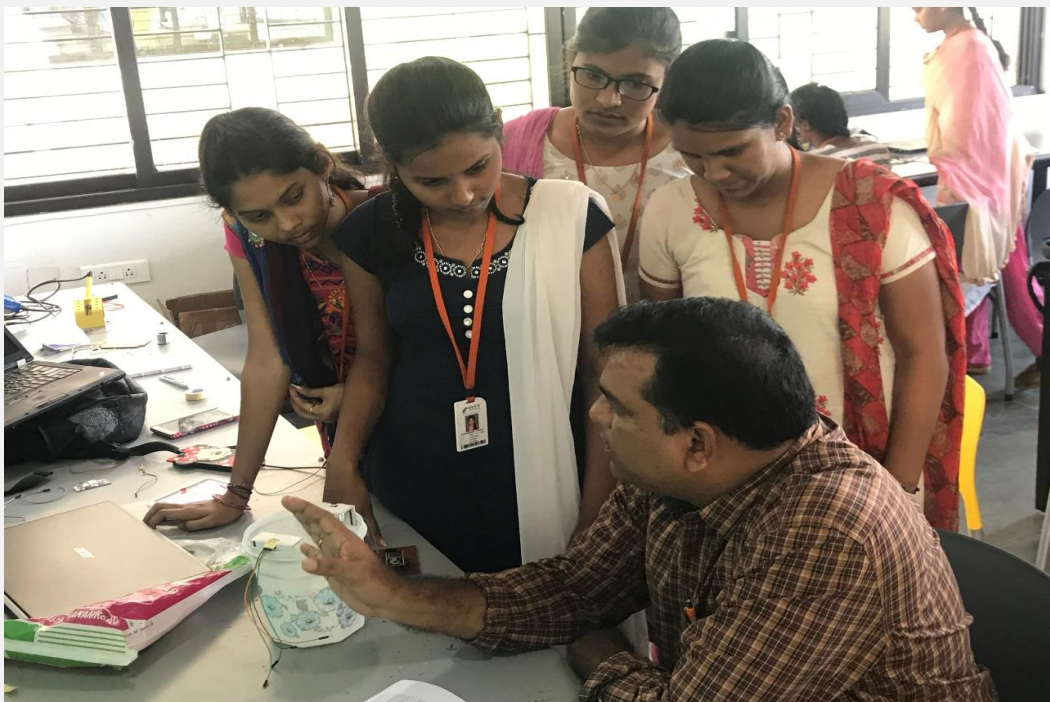
Workshops/FDPs/Trainings attended:

- ✓ Mr. Sreedhar Kollem attended a Faculty Development Program on “**Effective Technical Report Writing Using LaTeX**” conducted by Mahatma Gandhi Institute of Technology in association with Swecha from 08-03-2020 to 09-03-2020 at Mahatma Gandhi Institute Of Technology, Hyderabad.

Photographs of various activities:



A Two Day Hackathon on “**The Internet of Things**” was organized by the Center for Embedded Systems & IoT and ECE Dept., from 13-03-2020 to 14-03-2020.



A Two Day Hackathon on “**The Internet of Things**” was organized by the Center for Embedded Systems & IoT and ECE Dept., from 13-03-2020 to 14-03-2020..