



### 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.

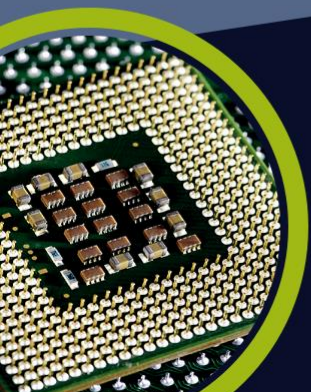


### Editorial Board:

**Chief Editor :**  
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### **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 one-day National Workshop on “**Digital Signal Processing using Python**” was organized by the department of ECE and IEEE SB, on 02-03-2019 by Dr.GVV Sharma, Associate Professor, IIT Hyderabad.
- ✓ A one-day National Workshop on “**Machine Learning**” was organized by the department of ECE and IEEE SB, on 29-03-2019 by Dr.GVV Sharma, Associate Professor, IIT Hyderabad.
- ✓ A six-day training Session on “**LABVIEW**”, organized by the department of ECE and NI instruments, from 10-04-2019 to 15-04-2019, by Mr. Sachine Mani Balan, LabVIEW Trainer, NI Instruments, Banaglore.

## Faculty publications:

### International/national journals:

- ✓ Sreedhar Kollem, Katta Ramalinga Reddy, and Duggirala Srinivasa Rao published a paper on “**A Review of Image Denoising and Segmentation Methods Based on Medical Images**”, in the International Journal of Machine Learning and Computing, Volume No.9, Issue No.3, Pages: 288-296, April 2019.
- ✓ Rajeshwar Rao Arabelli published a paper on “**Prototyping Product–Oriented Introduction to Engineering Course**”, in the International Journal of Innovative Technology and Exploring Engineering, Volume No.8, Issue No.5, Pages: 1-10, March 2019.
- ✓ Rajeshwar Rao Arabelli published a paper on “**Fingerprint and Raspberri Pi Based Vehicle Authentication and Secured Tracking System**”, in International Journal of Innovative Technology and Exploring Engineering, Volume No.8, Issue No.5, Pages: 1-12, March 2019.
- ✓ K. Rajkumar published a paper on “**Polarization Properties of Thyroid Tissue by Polar Decomposition of Mueller Matrix**”, in the Iranian Journal of Science and Technology, Transactions A: Science, Volume No.43, Issue No.2, Pages: 279-283, February 2019.
- ✓ Dr. J. Tarun Kumar published a paper on “**Secured Vehicle Safety System using GSM Technology**”, in the International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume No.8, Issue No.6s, Pages: 832-836, April 2019.

- ✓ Dr. Syed Musthak Ahmed published a paper on “**A Brief Survey of Asthma Classification using Classifiers**”, in the International Journal of Advanced Science and Technology, Volume No.28, Issue No.15, Pages: 32-36, April 2019.
- ✓ Mr. S. Srinivas published a paper on “**A Novel IEEE754 FloatingPoint Butterfly Architecture based on Multi Operand Adders**”, in the International Journal of Recent Technology and Engineering (IJRTE), Volume No.7, Issue No.5, Pages: 55-56, January 2019.
- ✓ Mr. Ch. Rajendra Prasad published a paper on “**Experimental investigation on road safety system at crossings**”, in the International Journal of Engineering and Advanced Technology (IJEAT), Volume No.8, Issue No.2s, Pages: 214-218, January 2019.

### Patent published:

- ✓ Dr. J. Ravichander, Mrs. Ch. Sridevi, and Mrs. B. Saritha got a patent entitled “**Apparatus of writing white board with the protection of Bio-metric based and eye signal**”.
- ✓ Dr. V. Malathy got a patent entitled “**A protective mobile case**”.

### Workshops/FDPs/Trainings attended:

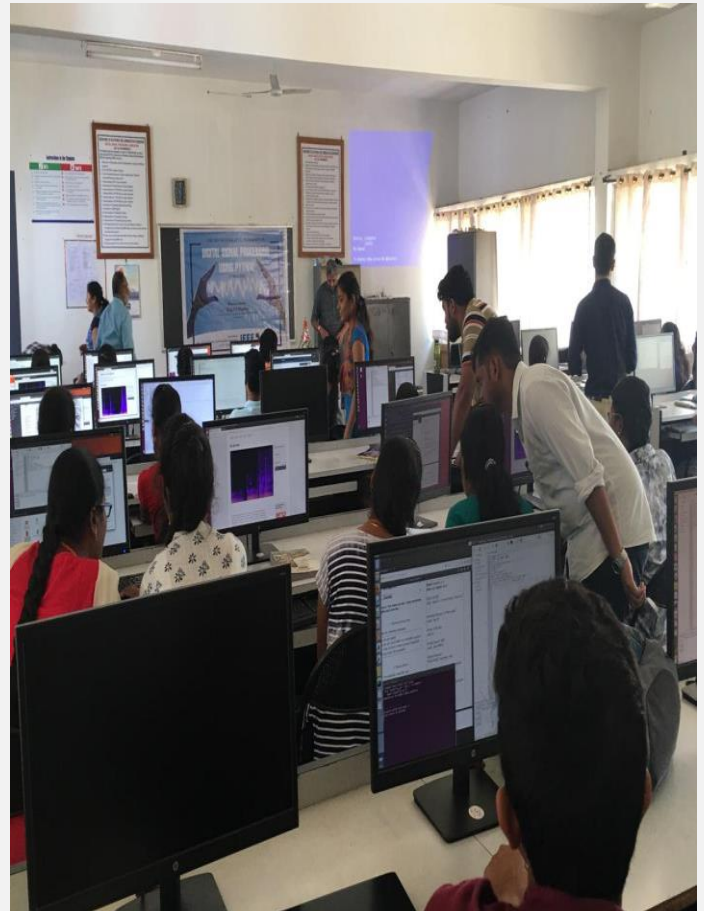
- ✓ Mr. Ch. Rajendra Prasad attended a National Workshop on “**Digital Signal Processing using Python**” was organized by the department of ECE and IEEE SB, on 02-03-2019.
- ✓ Mr. Sreedhar Kollem attended a Faculty Development Program on “**Machine Learning**” was organized by the department of ECE and IEEE SB, on 29-03-2019.

### Placement details:

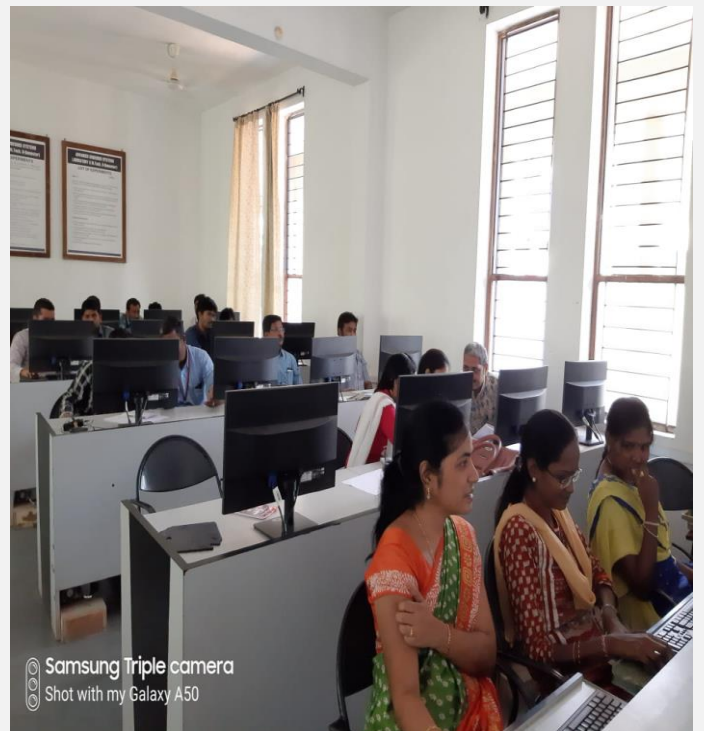
The following are the placements taken place between January to December 2019

S.No.	Name of the Company	No. of Students Placed
1	Aliens Group	07
2	HGS	21
3	IBS	06
4	Infosys	05
5	Justdial	06
6	Rapid Robotics	02
7	Savantis Solutions LLC	02
8	SD Mactech	02
9	Tech Mahindra	02
10	Triangle Tele Incroporation	14

**Photographs of various activities:**



Training Session on **“Digital Signal Processing using Python”**, by Dr.GVV Sharma, Associate Professor, IIT Hyderabad.



Training Session on **“Machine Learning”**, by Dr.GVV Sharma, Associate Professor, IIT Hyderabad.