e-Wizard

Departmental News Letter

Vol-III 2022-2023 Issue-I

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

St. Johns college of Engineering & Technology
Approved By AICTE, New Delhi, Recognized by UGC under 2(f) & 12(B),
An ISO 9001:2015 Certified Institution and Affiliated to JNTUA, Antapuramu.
Yerrakota, Yemmiganur-518360,Kurnool Dt., AP

About the Department:

ECE is the engineering course to learn about electronics and communications. Its implementation is wide spread, and it is almost found in all streams. Sporty presents this course backed up with stellar teaching performance and high end labs.

The beauty of electronics is it is used everywhere. From electronic goods manufacturer to hospitals, it is implemented in many devices. So, the future for this stream is highly positive.

The microprocessors, mother boards, picture tubes, LED, LCD, etc. are various electronic items, and you know about the impact they have created on billions of people and world's economy. You can be a part of this huge niche by getting into ECE at the engineering level.

Apart from the electronics, you also have communications in this engineering. It is important in industries like telecommunications, posts & telegraph, defense, etc. The communications department is very crucial for important aspects, like country protection, etc.

The Department of ECE was established in 2001 with an intake of 60 students in the UG program.

The ECE department offers Undergraduate programs. Electronics & Communication Engineering is one of the rapidly advancing fields in technological development arena with emerging ideas. The department aims at training students advanced cutting edge technologies and imparts values so that they are equipped to deal successfully any challenges in life, by exploring and creating new avenues. Students are taught to recognize their potential & use it for their best advantage. Our students are performing well in academics and they are encouraged in R&D activities and publishing papers in journals. They are participating in symposiums and seminars in various colleges and universities. They won the prizes in these events.

Department Vision:

To impart Technical education to the rural students and making them employable in the respective domain

Department Mission:

1. Up gradation of laboratories with state of the art equipment as the right tools of pedagogy for better lesson delivery
2. Providing bridge classes for average and slow learners.
3. Arranging interactive sessions with industries and thereby enhance the practical knowledge and technical skills of the student.

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 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 lifelong learning in the broadest context of technological change.

Program Specific Outcomes(PSOs):

1. Should be able to understand the concepts of Electronics & Communication engineering and their applications in the field of semiconductor technology, consumer electronics, embedded system, communication/ networking and other relevant areas.
2. Should have an ability to apply technical knowledge and usage of modern hardware and software tools related to Electronics & Communication engineering for solving real world problems.

Program Educational Objectives(PEOs):

1. Graduates will be able to stimulate continuing education with their existing knowledge in the field of Electronics and Communication Engineering.
2. Prepare graduates to practice their profession with ethics, integrity, and social responsibility in a global context.
3. Participate in lifelong learning activities to continue their professional development.

Faculty Development Programs:

- Ms Kakani Suvarna has participated in the Eight-Day Faculty Development Program on *Research, Publication and Patent in Humanities and Sciences* for faculty and researchers, organized by the Department of English and Other Foreign Languages, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-600089, from 22nd to 30th August 2022.
- Mr B Venkatesh has participated in the Five-Day Faculty Development Program on *"The Role of Artificial Intelligence in Renewable Energy Applications"*Department of Electrical and Electronics Engineering, KPR Institute of Engineering and Techynology, Coibatore, Tamilnadu, India, from 01.08.2022 to 05.08.2022..
- Mr P Imran Khan has actively participated online International Faculty Development on " The Role of |Artificial Intelligence in Renewable Energy Applications"from 01/08/2022 to 05/08/2022 conductreed by Department of Electrical and Electronics Engineering, KPR Institue of Engineering and Technology, Coimbatore, Tamilnadu, India.
- M Chennaiah St. John's College of Engineering and Technology Yerrakota has participated in the Eight-Day Faculty Development Program on *Research, Publication and Patent in Humanities and Sciences* for faculty and researchers, organized by the Department of English and Other Foreign Languages, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-600089, from 22nd to 30th August 2022.

Faculty Publications:

- P. Imran Khan, Dr.J.Kaliappan, 'Temperature-Sensitivity Of Two Microwave Hemt Devices: Algaas/Gaas Vs. Algan/Gan Heterostructures', AES, ISSN 2096-3246 Volume 54, Issue 06, Nov 2022
- P RamaThulasi and Mr C Sankar,' A 6T SRAM Based Two Dimensional Configurable Challenge Response PUF for Port Devices', NEUROQUANTOLOGY | September 2022 | VOLUME 20 | ISSUE 9 | PAGE 7925 DOI:10.48047/nq.2022.20.9.NQ44921.

Events:

- Expert M Mohammed Irshad Staff Engineer, Micron Technologies, Hyderabad has given guest lecture on VLSI Design on 19.11.2022 which helps students not to become ease at subject but confident of buiding their career .
- Students are engaged in extra and co curricular activities inside and outside the campus.

About the College

St. Johns College of Engineering Technology, the pride of Yemmiganur town, was established in the year 2001. Seven kilometers away from the Yemmiganur town, the college campus nestles amidst lush and luxuriant greenery in a sprawling 27 acres land. The College has specious, well ventilated, well equipped, and well furnished Laboratories, Workshops, Class Rooms, Drawing Halls, Hostels and a well stocked Central Library in addition to departmental libraries.

The college is affiliated to JNTUA, Anantapur and it is approved by AICTE, New Delhi and the Government of Andhra Pradesh. Beginning with a modest intake of 180 students in 4 branches in 2001, the college has grown in size and infrastructure to admit 540 students in 6 branches of B.Tech. Responding to the demand for Post Graduate courses in engineering, Management and Computer Applications, the college has started M.Tech Courses in 9 Specializations, and offer MBA course.

College Vision:

1. To be a preferred technical institution by the first generation learners from rural background.
2. The institute in turn will holistically elevate the students into technically strong and ethically sound individuals thereby moulding characters and career.
3. Partnering with them to contribute towards the advancement of community, region and nation as a whole.

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Engage all the stake holders and utilize the infrastructure to develop technically sound employable human resources to translate our vision into a reality.

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Faculty Development Programs:

- Dr Komera Sudhakaru has participated in Faculty Development Programme on "Disruptive Technologies in |Electronics, Communication and Signal Processing" organized by the Department of Electronics and Communication Engineering held during 20.03.2023 to 24.03.2023 at Sri Ramakrishna Instituite of Technology, Coimbatore.
- Dr J Kallapan has participated in the online FDP on "Antennas for 5 G Communcations & Beyond" during 08.07.2023 to 08.07.2023 organized by Department of Electronics and Communcation Engineering, Aditya Engineering College |(|A), Surampalem in association with IETE.
- Mr T Chakrapani has participated in FDP on "Dsiruptive Technologies in Electronics, Communication and Signal Processing" during 20.03.2023 to 24.03.2023 organized by Department of Electronics and Communication Engineering, at Sri Ramakrishna Institute of Technology, Coimbatore.
- Ms K Suvarna has participated in FDP on "Dsiruptive Technologies in Electronics, Communication and Signal Processing" during 20.03.2023 to 24.03.2023 organized by Department of Electronics and Communication Engineering, at Sri Ramakrishna Institute of Technology, Coimbatore
- Mr Syed Ahmed Basha has completed the five days National level FDP on "Recent Trends in Machine Learing and Artificial Intelligence for VLSI" during 29.05.2023 to 02.06.2023 organized by Department of Electronics and Communication Engineering, CMR Institute Technology – Bengaluru.
- Mr C Bhargav has successfully completed the five days National level FDP on "Recent Trends in Machine Learning and Artificial Intelligence for VLSI" during 29.05.2023 to 02.06.2023 organized by Department of Electronics and Communication Engineering, CMR Institute of Technology,Bengaluru.
- Mr Syed Mahaboob Basha has successfully completed one week Faculty Development Programme on "Signal Processing and Communication Systems Using Machine Learning Techniques " by ECE Department from 6th to 10th February 2023.
- Mr P Imran Khan has participated in the onlinw FDP on "AL/ML for Computer Vision and Medical Image Analysis Applications" during 25.03.2023 to 05.04.2023 Sponsored by Ministry of Electronics and Information Technology |(MeitY) organized by E & ICT Academy NIT Warangal and St Peter's Engineering College, Kompanny, Hyderabad.

Faculty Publications:

- Dr K Sudhakaru, "Effects of Atmospheric Parameters on Microwave Signal", Journal of Nonlinear Analysis and Optimization, Scopus, Vol 14, Issue 1, 2023
- Dr K Sudhakar and Mr Imran Khan, "A COMPACT MAGNETO-ELECTRIC DIPOLE ANTENNA FOR S-BAND MIMO THROUGH-WALL RADAR", ResMilitaris,vol.13, ISSN: 2265-6294 Spring (2023).
- Mr M Chennaiah and Mr M MAhaboob Basha, "BLUETOOTH WITH GSM BASED SMART WHEELCHAIR
- TECHNOLOGY WITH SAFETY AND CONTROL FACILITY", ResMilitaris,vol.13, ISSN: 2265-6294 Spring (2023)
- Mr T Chakrapani and V John Sundar Raju,"Examination Question Paper Leakage Protection Based on IOT", ResMilitaris,vol.13, 4 ISSN: 2265-6294 Spring (2023)

Events:

- Expert C Vijaya Kumar Bangalore has given guest lecture on Satellite Communication on 25.02.2023 which helps students not to become ease at subject but confident of buiding their career .
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