

A. J. Institute of Engineering & Technology



PRATHIBIMB

The Reflection of EC @ AJIET

Volume 3

Issue 2

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
Academic Year (Oct-Dec): 2021-2022



ABOUT THE DEPARTMENT

The department of Electronics and Communication Engineering was established in the year 2016 and current intake is 60 students. The department offers undergraduate program BE, M.Sc (Engg) and PhD in Electronics and Communication engineering. The department has highly qualified faculty with 1 Professor, 4 Associate Professors and 9 Assistant Professors. The department is geared up with outcome-based education imparted to the students. Students at the department are consistently provided with opportunities to upgrade their technical knowledge and develop skills that make them best employable, qualified for higher education or develop them as a strong entrepreneur. The teaching faculty is actively engaged in research and they published papers in National/International conference proceedings/Journals. As a part of the curriculum, industrial visits, webinars, technical talks and workshops are arranged for students. The Institute has an IEEE, IE (I), ISTE Student's Chapter. The students actively participate in the various activities of IE (I), ISTE and IEEE. All the students of various departments participate actively in embedded & robotics club and Radio club which is run by the department itself. Special Soft skills, aptitude and technical trainings are imparted to the students as a part of regular curriculum to make them excel in their career. The department classrooms are much spacious with LCD projectors fitted for conducting e-lectures to make learning a better experience in the department. The department also has well established and well-equipped laboratories for student's technical pursuit. Faculty members are being constantly encouraged to develop themselves through Various FDPs, conferences, workshops, publications, R & D activities and Massive Open Online Courses (MOOCs) exams. They are exposed to latest technologies like IoT, Robotics, Machine Designing, etc. through R&D labs established by industries in these fields. Students are also made industry ready through various trainings, regular company internships, mini and major projects

VISION

To be recognized as a centre of excellence in the region by nurturing the young innovative minds into skillful and ethical professionals to cater the global industrial and societal needs.

MISSION

- To establish state-of-the art laboratories to facilitate research and innovation to upgrade the knowledge and skills.
- To provide industry interaction for training programs on latest technology.
- To provide ethical and value based education by promoting activities addressing the societal needs.

HOD-DESK

Welcome to the Department of Electronics and Communication Engineering at A J Institute of Engineering and Technology, Mangalore. We started our journey in the year of 2016. Over the past five years, we have grown our expertise and competence in the core ECE and research. The primary focus of our department is to impart technical knowledge to students, promote their problem solving and innovative skills in the growing technologies. We have a long history in educating young minds, conducting innovative research, and offering professional services to local and overseas communities. Our department has a distinguished record in both teaching and research. Faculty members have excellent academic credentials and are highly regarded. This website provides an overview of the academic programs, research activities of our department, research facilities, profiles of faculty members, and details of student activities. Many of our graduates now occupied good positions in the industry and community. Each year, we also invite various departmental speakers, academicians and practitioners in a variety of forums, in addition to the numerous and unparalleled public events. We also encourage students to organize and participate in various events which sets a challenge to the young minds to provide solutions for the problems of social relevance. With all these inputs one can find our students very hardworking, practical-oriented and highly skilled to work in any environment. We are encouraged to see many industries coming back to our department, which reinforces our belief in the effectiveness of our students and their suitability to the dynamic corporate world.

Dr. Gnane Swarnadh Satapathi

Head of the Department

EVSA

• Selection of New Office Bearers

The Electrovertz Student Association (EVSA) conducted election for the post of new office bearers for the academic year 2021-22. The election took place at Seminar Hall 2 from 2:00PM on 8/10/2021.

The following candidates were elected by election:

SI No	Name	Designation	Semester
1	Ms. Thrusha Rao	President	VII
2	Ms. Saniha Shetty	Vice-President	V
3	Mr. Sushant	Secretary	VII
4	Ms. Seema	Joint Secretary	III



• Ayudha Pooja Celebration

The Department celebrated Ayudha Pooja on 14/10/2021 in Basic Electrical lab, AJIET from 9.00am onwards. Ayudha Pooja rituals were carried out by the Archak in the presence of Principal- Dr Shantharama Rai, HOD of ECE- Dr. Gnane Swarnadh satapathi, HOD's of other departments along with Staff and students. The Program was co-ordinated by Prof. Prakash K Shetty, Mr. Manju Kiran B and Mrs. Pratheksha Rai N.



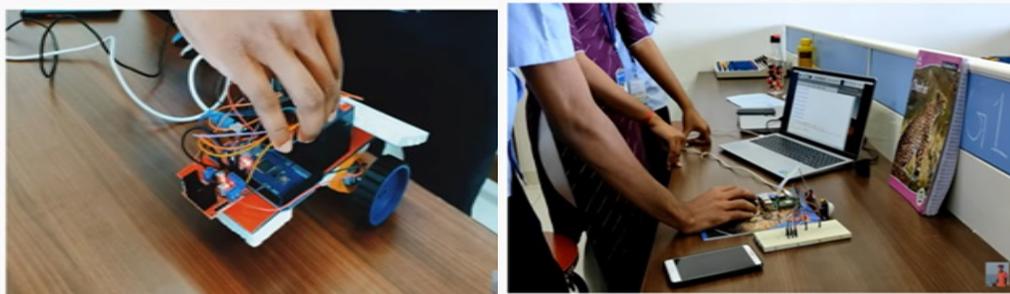
Talk

- The Department in-association with EVSA organized a talk by Dr. Veluri Sudhakar on “ **Applications of Engineering in Medical Field**” on 18/10/2021 at Seminar hall-2 along with Dr. Sreeraj, AJIMS. The talk was conducted in the presence of Dr. Shantharama Rai C, along with Dr. Gnane Swarnadh Sathapathi with the faculty and students of ECE. The Program was co-ordinated by Prof. Prakash K Shetty and Mrs. Pratheksha Rai N.



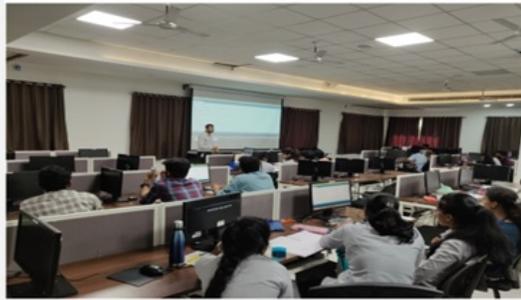
Mini-Project Exhibition

- The Institute of Engineers (India) student chapter of AJIET in association with Embedded & Robotics club organized a mini project exhibition for third year students on 22-12-2021 from 9:30AM to 12:00PM. The main objective of this exhibition was to explore the technical skills among our students and give more exposure towards technical knowledge which is very much required in building their career. The event mainly focused in developing interest among students toward new innovation and rapidly growing technology.



Workshop

- The Institute of Engineers (India) student chapter of AJIET in association with Embedded & Robotics club organized a workshop on 07-12-2021 about "NODE MCU" from 9:30AM-5:00PM. The main aim of the workshop was to give hands on experience to use the 'NodeMCU' development board. The Workshop was conducted by the resource person Mohammed Sadiq.



Student Accomplishments

- Prithviraj Shetty secured 2nd place in 200mtr Running in the Rotaract District Sports on 05/12/2021 Held at St.Aloysius PU College Ground, Mangalore.
- Prithviraj Shetty secured 2nd place in 4x100mtr Relay in the Rotaract District Sports on 05/12/2021 Held at St.Aloysius PU College Ground, Mangalore.
- Prithviraj Shetty secured 2nd place in Cricket in the Rotaract District Sports on 05/12/2021 Held at St.Aloysius PU College Ground, Mangalore.

Faculty Achievements

- Indian patent Published on 10/12/21 "SMART SYSTEM FOR THE MENSTRUAL CUP USING MACHINE LEARNING" by Dr. Shantarama Rai C, Dr. Gnane Swarnadh Satapathi, Mr. Raghavendra Havaladar K, Mr. Ganesh UG, Mr. Manjukiran B, Mr. Basappa Bharamappa Kodada, Miss. Sheetal adappa, Mr. Prasanna Kumar P, Mr. Roshan preetham crasta A, Miss. Shreeja, Tasmiya Zulekha, Miss. krithi B shetty, Miss. Shreya S, Miss. Moksha by Application No 202141054514
- Australia Patent Granted on 17/11/21 "PARINATA VIDYUT SAMYUTANAM - An advanced electric extension box" by Raghu Chandra Garimella, Dr. Gnane Swarnadh Satapathi, Mastanamma Yarram, Ramesh Babu Jarapala, Vamshiram Martha, Sathish Pochampalli, Pavani Gandreti, Poojitha Boreddy, Rohith Kumar Gadam, Khwajamoinuddin Mohammad, Pavankumar Martha, Karthik Reddy Manukonda have on patent number 2021104789.

Placement (2018 Batch)



Ms. AKSHARA ASHOK
HCL



Ms. DHANYA V SHETTY
HCL



Ms. DEEKSHA G
SASKEN



Mr. HRITHIK R D
SASKEN



Ms. K PALLAVI
SASKEN



Mr. MANVITH K
SASKEN



Mr. AKSHIT SURESH
SASKEN



Ms. POOJA SP
SASKEN



Mr. DHANUSH
I WAVE SYSTEMS



Mr. HARSHITH
I WAVE SYSTEMS

Editorial Board



- **Chief Editor:** *Dr. Gnane Swarnadh Satapathi, HOD, Department of E&C*
- **Editor:** *Mrs. Pratheksha Rai N, Assistant Professor, Department of E&C*
- **Student Editor:** *Ms. Pooja SP & Ms. Thrusha K, 4th year, Department of E&C*
- **Student Editor:** *Mr. Yashas Shetty K, 3rd year, Department of E&C*
- **Student Editor:** *Ms. Hitaishini C U & Ms. Geetha D P, 2nd year, Dept. of E&C*

Program Educational Objectives(PEOs)

PEO1	Exhibit a desire for lifelong learning through professional and societal activities.
PEO2	Exhibit and apply their technical skills and knowledge in Electronics and Communication Engineering for industry and societal needs
PEO3	Exhibit leadership qualities, professional skills, management skills and ethics needed for successful career.

Program Specific Outcomes (PSOs)

PSO1	Embedded Systems: Ability to apply the fundamental knowledge of core Electronics and Communication Engineering subjects in the analysis, design, and development of integrated electronic systems.
PSO2	Communication Systems: Ability to apply the fundamental knowledge of signal processing in the analysis, design, and development of communication systems.
PSO3	Simulation: Ability to use modern electronic tools such as MATLAB, Xilinx and Multisim, to design and analyze the complex electronics and communication systems.

Program Outcomes (POs)

- Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 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.
- 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 consid-

erations.

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 life-long learning in the broadest context of technological change.