ECE NEWS BULLETIN (2019-2020)

DEPARTMENT OF
ELECTRONICS AND COMMUNICATION ENGINEERING

TIRUMALA ENGINEERING COLLEGE

(Approved by AICTE, New Delhi, Affiliated to JNTUK Kakinada)

(An ISO 9001:2015 Certified Institution)

Accredited by NAAC & NBA,

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Chief Co-ordinator

Dr. Y.V. NARAYANA
B.Tech.,M.E.,Ph.D.,FIETE
Principal

Editorial Board

Mr. T. Jagadeesh, Assoc. Prof
Dr. M. Manoj Kumar, Professor, Dept. EEE
Chief Editor
Mr. B. Yeswanth Raj, Asst. Prof

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About the Department

The ECE department started in the Year 2008 with the intake of 60 students and intake increased from 60 to 120 in 2009, later expanded 120 to 180 in 2012. Right from inception principal Dr.Y.V.Narayana him self lead the team. The goal of the department is to make the students fundamentally strong in the field of Electronics & Communication Engineering. The department has good infrastructure and excellent placement records, thirty eight students of the recently passed out batch (2016) were placed in reputed companies like TCS, NTTDATA, MIND TREE, Capgemini etc.

The department focuses on quality teaching, training and research activity among staff and students. Student development activities like National level workshops, National level student symposia and seminars are conducted regularly to inculcate research activity and expose the student community to external world.

The department has experienced faculty members with quality teaching. All staff members work with great enthusiasm and commitment towards all round brilliance of students. The department is encouraging students to participate in various co-curricular events, sports and motivates the students in helping poor and needy.

VISION:

To become a centre for academic excellence by producing high quality engineers in Electronics & Communication Engineering with global competence empowered by technical expertise, innovation, research and the knowledge of cutting edge technologies, employability, higher education, entrepreneurial skills along with socio-ethical and eco-friendly values for the rural development

MISSION:

To develop the high quality Electronics & Communication Engineers with the fundamental engineering principles, intellectually adept, professionally deft, innovative research capabilities, exemplary skills, technological progress of mankind, tracking technological environment by providing the high quality instruction, infra, faculty, modern teaching and learning methods, training with socio-ethical and entrepreneurial values as the inner strength for the rural development.

PEO'S

1. **Preparation:** To strengthen the learners with fundamental knowledge in the concepts of Engineering Mathematics, Applied Science and Basic Electronics Engineering subjects for problem analysis, comprehend to develop solutions for new hardware, software and other tools in Electronics & Communication Engineering field.

2. **Core competence:** To enable the learners with core curriculum knowledge in theory and practical of Electronics & Communication Engineering to develop the innovative skills, critical analysis, design, simulation, investigation of complex problems, reasoning, development & testing knowledge for offering solutions to real time problems related to globally evolving techno-corridor developments of Electronics & Communication Engineering.

3. **Breadth Knowledge:** To enable the learners with breadth knowledge to build the Electronics & Communication Engineering professionals to have the team work and skills for developing communicative abilities, lifelong learning and aptitude of project management & finance with entrepreneurial values for rural development.

4. **Advanced Professional knowledge:** Implementation of multi-disciplinary approach, development of the R&D skills by MOUs with premier industries and institutions, interacting with training sessions and industrial visits to the learners to have awareness in latest trends of Communication, Networks, Signal processing etc… with the modern tools and modules compatible to escalating needs of the society.

5. **Career Development and ethics:** To enable the learners with the aptitude of competitive knowledge of real time requirement of cutting edge technologies for promoting employability, higher education by imbibing ethical, social and eco-friendly values.

PROGRAM OUTCOME (POs)

Engineering Graduates will be able to:

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

PROGRAM SPECIFIC OUTCOME (PSOs)

PSPO1: Should have the capability to comprehend the technological advancements in the usage of modern design tools to analyze and design subsystems/processes for a variety of applications in Electronics & Communication Engineering.

PSPO2: An understanding of social-awareness & environmental-wisdom along with successful career and to sustain passion and zeal for real-world applications using optimal resources as an Entrepreneur.

Message From Secretary: It is a great pleasure for me to know that Department of Electronics & Communication Engineering of Tirumala Engineering College is going to publish their departmental Newsletter. I do hope this will cultivate and inspire all the faculty, students and education lovers curious. It will also create a platform for curious

Message From Principal: I have a great pleasure in expressing my thoughts as the Principal of Tirumala Engineering College. Our institute holds the manifold distinction of being amongst the best when one considers the present status of technical education today. Our teachers are invited as resource personnel at national and international seminars, conferences and symposia in India and abroad. I wish the best for all our staff and students who reiterate their aims at providing the best in academic and extra-curricular fields. It is my pleasure in congratulating the editorial board on this pleasant occasion of releasing the newsletter. It is great to find a considerable number of winners and participants in co-curricular and extracurricular activities which certainly prove that our staff and students are adequately equipped and possess necessary skill-sets to bring such laurels to the institution. I wish that this number may grow in the years to come. I am sure that publishing a newsletter of this sort containing the achievements of the wards will be recognition to them and I wish them all the very best for future endeavors.

Message From Editor: On behalf of the Department of ECE, we are proud to present the news letter. This brings out the achievements of our students, staff and alumni in curricular, co-curricular and extra-curricular activities. It is a repository of knowledge and provides an open forum for the exchange of ideas. We had the opportunity to interact with various informative and creative minds. This news letter is the culmination of incredible ideas and information from each of its contributors. We would like to express our gratitude to the faculty coordinators and the faculty in-charge, who have been an integral part of the news letter by guiding us every step of the way. We would also like to thank each and every member from the content and the design teams for their dedication and arduous work to ensure that this newsletter is a success.

Message From Chief Editor: It is a matter of great pleasure that I was given the opportunity to work on the different activities of student and faculties, events, newsletter will encourage students to use it as a platform to of Technology is going to publish their departmental Newsletter I do hope newsletter will encourage students to use it as a platform to convey their creativities.

Message From Student Co-Ordinator: Hello Readers! It is with immense pleasure that we, on behalf of the ECE department, present magazine! The Magazine is a repository of intriguing articles by students, faculty and alumni alike on their achievements and experiences in co-curricular and extra-curricular activities collected in one place for the readers to revel in. We hope you enjoy the contents of this edition as much as we enjoyed putting it together! This edition, compiled in the midst of an unforgiving pandemic would not have been possible without the support of our faculty in-charge, who guided and mentored us during the entire duration, and the Impulse Content & Design team, who worked against impossible deadlines to make this magazine a reality. This edition, unlike any other, has been crafted with love by the editorial team of 2018 and 2019. We're extremely grateful to our seniors for their guidance, valuable insights and contributions. We would like to extend our heartfelt gratitude to each and every one of them for all the hard work they put in, making this edition a grand success. This last year has been extremely challenging for all of us. However this pandemic has time and again demonstrated the human tendency to fight back and emerge stronger. Here's to hoping that the situation eases soon, so we can meet in person at our beautiful vibrant campus very soon! -K. Sri Charan Vaibhav, 16NE1A0473

STUDENT CORNER

Academic Achievement :-

123 members are graduated this year.

A.P.L.R. SRAVYA,
16NE1A0405
She secured 82.33%
in the Academic performance

CURRICULAR ACTIVITIES

Work Shops :-

✔ Organized one week workshop on PCB Design by Mr. M. Umamaheswara Rao, Ms. D.Chandi Rani in association with APSSDC during 19-09-2019 to 23-09-2019. Totally 184 members are joined to this workshop.

✔ Organized five days workshop on INTERNET OF THINGS for 3rd&4th year students by Dr.T.Surya Narayana Murthy, Asst. Professor during 11/03/2019 to 15/03/2019

✔ Organized a training on soft skills for 4th year students by talent io hyderbad.

✔ Organized a work shop on Analog IC design for 3rd &4th B.Tech students during the 17/06/2019 to 21/06/2019.

✔ Organized a Certificate course on Programming with mentor graphic tools on 28-09-2019 to 02-10-2019.

✔ Organized Certificate course on Programming using MATLAB for beginners on 12-12-2019 to 16-12-2019.

Guest Lecture :-

✔ Organized Guest lecture on demystifying Robotics by Dr. Srikanth Madhavan, CEO, Kabani tech labs, kerala on 23-06-2020.

✔ Organized Guest lecture on Lossless Compression Techniques Dr.Puli Kishore, Assistant Professor, NIT AP on 11-07-2020.

✔ Conduct the Guest lecture on Enhance Technical Skills in line with the requirements of the industry, Usage of modern tools and technologies by Dr. D. Krishna Vardhaman Engineering College on 28-09-2019 to 02-10-2019.

✔ Organized Optical wireless communication program by Dr.T. Suryanarayana Murthy, JNTU, Vijayanagaram on 27-06-2020.

Training programs: :-

✔ Conducted a 10 days (1-06-2019 to 10-06-2019)training on soft skills by talelnt tio Hyderabad .

✔ Conducted company specific training by talelnt tio Hyderabad .during 06-11-2019 to 09-11-2019 Soft skills training program for 3rd students by Mr. B. Yeswanth Raju Training faculty TEC to meet the Industry readiness.

✔ Career guidance Program on Opportunities and preparation for core companies s Mr. M .Pavan Kumar Training faculty TEC.

✔ An awareness Program on GRE / TOFEL - Career guidanceprogram by Texas Review to meet the requirements of the Industry readiness on 8-10-2019.

Gate qualified :-

It is well known that GATE is the diagnosis test to check the knowledge level of an engineering student. We feel proud to share that every year our students get qualify in this prestigious examination.
- V. NANDA DEEP, 14NE1A04F9 secured 42.33 Marks

Industrial Visit :-

✔ Industrial visit was organized for the 3rd year students Srihari Kota on 13-09-19 to improve their concept of applying the theoretical knowledge in the relevant field of industrial need.

✔ The study of the actual working of television station and its involved components. It covered the recording room , camera control unit, producer control room, audio control room and telecast van.

Major Recruiters & Our Best Placed Students :-

Prayaga Fest :-

✔ Organized a online Prayaga Fest through code tantra different technical events like paper presentation ,poster presentation ,quiz—etc on

✔ Other college students are participated in PPT

Best final year projects :-

PRIZE	TITLE OF THE PROJECT	STUDENTS	GUIDE
I	Generation Of secure Otp for Atm security and theft protection and Image sharing technique	K.SriCharanVaibhav N.Lalitha Bhavani N.Naveen P.BalaRaju	Mr.G.SambasivaRao
II	Full View Area Coverage Rotable Camera Using Wireless Sensor Networks	R.Naveen Kumar R.Praveena Jyothi S.Pooja V.Swathi	Mr.G.V.Hanuman
III	Design Of Automatic Accident Detection And Management In Vehicular Environment Using Iot	M. Charulatha Devi J.Bala Kumar Reddy K.NagaPravallika M.Siva Rama Krishna	Ms.Sk.Rizwana

Internship programme :-

✔ 38 members are selected for internship in smart bridge during 25-05-2020 to 30-05-2020.

Professional Body IETE :-

✔ IETE student forum was inaugurated on 6-2-2013. Dr. M Kamaraju, Professor and HOD of ECE department, Gudlavalleru Engineering College was the chief guest. He expressed his happiness encouraged our faculty members and students to join IETE. Our faculty members and students got enrolled in IETE. IETE membership provides support for continuing research work, attending work shops The Association comprises of President from final year, Vice-President from pre-final year, Secretary from second or first year and Treasurer from third year. The association conducts the a faculty representatives.This year 107 member are joined in professional body memberships.

IETE EVENTS :-

✔ Organized workshop on PCB Design & Fabrication for 2nd year Students Coordinated by Mr.B. Prakash, Asst. Prof. during 19- 09-2019 to 23-09-2019.

✔ Organized Industrial Visit on SHAR, Sriharikota for 3rd year Students Coordinated by Ms.T.L.K Prasanna, Asst. Prof. on 23-09-2019.

✔ Organized Sports & Games for 2ndyear Students by R. Lakshmi Kavya during 30-12-2019 to 31-12-2019.

✔ Organized Tour on Kondavidu for 2ndyear Students by T.L.K Prasanna, Asst. Prof. on 25-01-2020.

✔ Organized Technical Event of Just A Minute On Burning Issues for 2nd year Students Coordinated by Mr.N.V.N.K Suresh Kumar, Asst. Prof. & P. Venukumari, Asst. Prof. on 17-06-2020.

Organized webinar on" unleash the entrepreneur in you "from APSSDC during 21/06/21 to 22/06/21

Engineers Day Celebrations: organized engineers day in our college by inviting A. Vara Prasada Rao as chief guest.

Youth talk: Our Collge Student are participated in youth talk at Narasasraopet Some students got prizes in youth talk

Painting Competition

Faculty Corner

ACHIEVEMENTS :

Happy to announce that our beloved Principal Dr. Y.V Narayana Garu received distinguished Professor Award by Chief Guest Justice M.S.K jaiswal.

Mr. T. Jagadeesh, awarded "Organizing Committee Head" for organizing International conference

CONFERENCE :

Department of ECE has college organized a online international conference in association with conference world on Recent Innovation in science ,engineering ,humanities and management (SEHM-2020) during 25th & 26th September 2020

Paper Publications :

- ✓ Dr. Y V Narayana Automatic cardiac abnormality detection using electrocardiogram signal , ISSN 2394-5125,VOL 7 ISSUE 18, 16 JUNE, 2020.
- ✓ T. Jagadeesh HSIC : Hyper Spectral Image Classification using Deep Learning Technique 18925-18931 ISSN: 0193-4120 ,April 2020.
- ✓ Mr. D. Mahesh, Asst. Professor, "Design of Reversible Rca using Ns Gate" in the International journal of Research Advent Technology, March 2019. With- ISSN No. 2321-9637
- ✓ Mrs. Ch. Karuna Pravaha, Asst. Professor, "Speech based ubiquitous embedded text logger" in the International journal of Research Advent Technology, March 2019. With- ISSN No. 2321-9637
- ✓ Mrs. B. Thriveni, Asst. Prof, Ch. Kamala Kumari, Asst.Prof "Implementation of smart parking system for parking station buildings" in the International journal of Research Advent Technology, March 2019. With E- ISSN No. 2321-9637.
- ✓ Mrs. R.L. Tirupathamma, Asst. Prof, "Internet of things based garbage clearing system system Nodemcu" in the International journal of Research Advent Technology, March 2019. With E- ISSN No. 2321-9637.

Faculty Participated Outside the World :-

- ✓ Ms.T.L.K.Prasanna has participated in Faculty Development Program on "VLSI Design using open source EDA Tools" from 26/06/2020 to 30/06/2020 at Chalapathi Institute of Engineering and Technology.
- ✓ Mrs.L.Saritha has participated in "Artificial intelligence" in 5 Day National level Online FDP 22/06/2020 to 26/06/2020 conducted by PVVK Institute of Technology.
- ✓ Mr.G.Venkata Hanuman has participated in National Level 5 day Faculty Development Programon "OBE – NBA PROCESS" Organized by Narasaraopeta Engineering College , from 15/05/2020 to 19//05/2020.
- ✓ Ms.Sk.Rizwana has participated in three day national online Faculty Development Program on " Image Processing and Computer Vision" organized by Anil Neerukonda Institute of Technology Sciences during 29/05/2020 to 31/05/2020.
- ✓ Mr.G.Sambasiva Rao Participated in the Spoken Tutorial IIT BOMBAY Recognized Faculty Development Programme on "Arduino" Conducted by KINGS ENGINEERING COLLEGE, CHENNAI From 01/06/2020 to 05/06/2020 .
- ✓ Mr.G.Sambasiva Rao has participated in the 3 Days Live Online FDP On "IOT" ,Conducted by Lendi Institute of Engineering & Technology during 27th -29th May2020
- ✓ Mr.G.Sambasiva Rao, has participated in the Three days FDP on "AI and IoT for Medical Applications" organized by GMR Institute of Technology, Rajam during June 01 - 03,2020
- ✓ Mr.G.SambasivaRao has participated in FDPon"RecentTrends and Future Applications in Electronics and Communication Technologies" conducted by MLR Institute of Technology from 29/05/2020 to 02/06/20
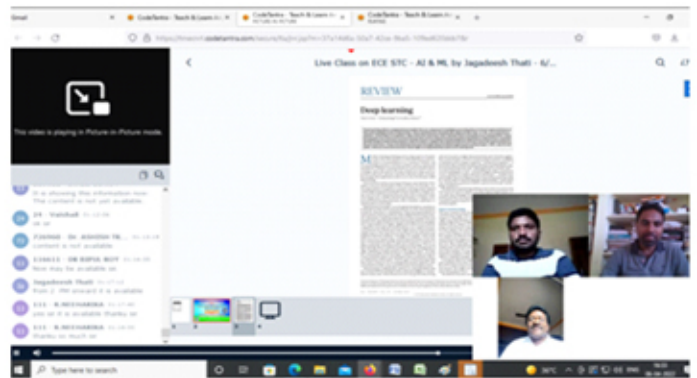
FDP at our College :-

The five day live online faculty development program on "Recent trends in communication and signal processing " during 12thjune to 16thjune 2020 organized by Dept of ECE in Tirumala Engineering College 120 FACULTY MEMBERS from various colleges attended this program.

Five Day Live Online Faculty Development Program On **RECENT TRENDS IN COMMUNICATION AND SIGNAL PROCESSING** From: 12-06-2020 to 16-06-2020 Organized by Department of Electronics And Communication Engineering **TIRUMALA ENGINEERING COLLEGE** (Approved by AICTE, New Delhi, Affiliated to JNTUK Kakinada) Accredited by NBA & NAAC Jonnalagadda, Narasaraopet 522601

STTP: conducted an short term course on
AI&ML during 26/06/2020 to 30/06/2020

Teacher's Day: The managent and principal of TEC encourages the faculty with best teacher awards
and incentives on this occasion

MS. A. Navya Sai Sri, Asst.prof received best
teacher award from our department

The students of ECE department habituated to
celebrate the teachers day to show their respect
towards the faculty members on this day

Extra-curricular activities :Beyond the interests and individuality ,extracurricular activities prove they can
make meaning full contributions and maintain a commitment and manage their time and priorities

Interaction with students: interaction program about
the department conduct for 2nd year students by ECE Staff

Interaction with 3rd year students about aca-
demics & placement training

Visited on Kondavedu Industrial Area for 2nd Year student on 25-01-2020

Yoga day was celebrated on Friday 21 June was held in seminar hall ---- YOGA FOR HEART

Some joyful Memories on fresher's day

National Service Scheme Unit Activity :

Awareness program and rally on cashless transaction at Narasaraopet on 7/09/2019
A campus cleaning program me was conducted by NSS wing TEC on 17th September, 2019 at our campus. A total of 80 NSS volunteers participated in the programme. Coordinator is Mr.D.Hanumantharao

Recreation :

New Year Celebrations at TEC

Alumni Meet :

Dept of ECE organized Alumni meet in online on 8/06/2020 .Around 100 students from 2017,2018,and 2019 took part in the one day meet which was conducted in the presence of management ,principal ,HOD and other staff members of ECE participated and interacted with students enthusiastically The meet facilitated the Alumni members to share their experiences in their working areas.

Alumni Message

Hope all are well.

    I had completed my degree of Electronics & Communication Engineering from Tirumala engineering college in the year of 2018. It was a very grateful journey over there with lots of memories. My teachers and all the faculty members had supported me for every step.I was acted as student co-ordinator from the dept.of ECE to the college level fest in called prayaga which took a great success and that time got proper support from everyone. I am Working as Sr.System Engineer in Infosys, Bangalore.

G.KAVYA REDDY,15NE1A0445