

ECE QUEST

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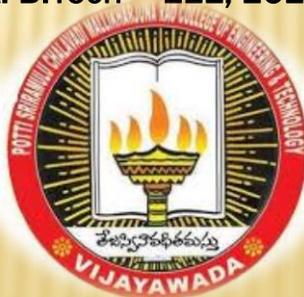
PSCMR

College of Engineering and Technology

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ABOUT THE DEPARTMENT

The Department of **Electronics and Communications Engineering** envisions the E.C.E graduate as a competent and ethical professional in the areas of electronics, communications, and digital signal processing. The Department of Electronics and Communication Engineering is established in **2008**. It offers B.Tech programme with a student intake of **120**. The department is accredited by NBA for three years.

Vision:

To be a leading center for education and research in electronics and communication engineering, making the students adaptable to contemporary technologies with sound knowledge and socio-ethical values in an integrated learning environment.

Mission:

- ✘ **M1:** To produce knowledgeable and technologically competent engineers for providing services to the society.
- ✘ **M2:** To have a collaboration with leading academic, industrial and research organizations for promoting research activities among faculty and students.
- ✘ **M3:** To create a unified learning environment for sustained growth in electronics and communication engineering and related areas.

PSO'S

- ✘ **PSO1:** The ECE Graduates will be equipped with knowledge of complete design flow from specification to silicon in areas of both digital and analog VLSI Design and will be able to work in IC design companies.
- ✘ **PSO2:** The ECE Graduates will be trained with microprocessor and microcontroller based system design skills and can work as design and verification engineers in the area of embedded systems design.
- ✘ **PSO3:** The ECE Graduates will be able to apply engineering knowledge for design and implementation of projects pertaining to signal processing and communications.
- ✘ **PSO4:** The ECE Graduates will be incorporated with necessary soft skills, Aptitude and technical skills to work in it and public sector.

PEO'S

- ✘ **PEO1: Engineering Foundation**

To produce graduates with firm foundation in electronics and communication engineering.

- ✘ **PEO2: Core Competence**

To motivate graduates to Analyze, Design, Develop, Optimize and implement electronic systems with competent spirit.

- ✘ **PEO3: Breadth Knowledge**

To enable graduates with sufficient breadth in electronics and its related fields to solve general engineering problems in an eco-friendly environment.

- ✘ **PEO4: Soft Skills**

To make graduates with a professional outlook who can communicate effectively and interact responsibly with colleagues, Clients, Employers and society.

- ✘ **PEO5: Knowledge Enhancement**

To prepare graduates who pursue lifelong learning and professional development including higher education.

EVENTS ORGANIZED

- ✘ The day-long seminar on **Embedded Systems and its applications** was organized for the students of II & III Year ECE on 3rd January 2020. At the seminar the students learned about the embedded informatics. Embedded expert Dr. T Kishore Kumar, Professor, Department of E.C.E, NIT Warangal, India gave information about embedded systems and Proteus software in which he told the students what the embedded system is and how it works, along with that they are aware of the usefulness of Proteus software to all students. It is to be noted that an embedded system is a programmed controlling and operating system with a dedicated function within a larger mechanical or electrical system, often with real-time computing constraints. It is embedded as part of a complete device often including hardware and mechanical parts.
- ✘ Safety is the key priority at PSCMRCET and the Institute is constantly focusing on improving conditions and culture with respect to health and safety of the students, faculties, staff and campus residents. To promote the safety culture and awareness, the ECE Department has organized a Guest Lecture on **Awareness on Woman Safety** by experts and professionals in the field of health, safety and environment on 1st February 2020.

EVENTS ORGANIZED

- ✘ The ECE Department conducted Project Expo as a part of **Smart Hackathon India Competition** on 6th February 2020 to improve the programming skills and for the social safety which is a technical event in which the participants should prepare their project at home and they have to bring the project to demonstrate before the judges. There is only one round and the best is chosen by the judges and the respective prizes are given away.
- ✘ At PSCMRCET, emphasis is given on not only making the student academically brilliant, but true leaders and team players, thus preparing them for the real life corporate world. For this, eminent personality Sri Rama Krishna Dasari, CEO, Efftronics Pvt. Ltd lend valuable Information regarding the **Capabilities needed for fourth Industrial Revolution** from his Experiences to all II, III & IV Year students. The Guest Lecture enriched the students with the latest updates of the Industries and Technicalities. The Students are bestowed with knowledge about Industry needs, latest technical updates, Avenues for Higher studies also.

EVENTS ORGANIZED

- ✘ To have a knowledge on latest trend in the field of Electronics & Communication Engineering, one day workshop is organized for both teaching faculty and all year students by Mr.RajSamala, Mr.C.S.Vasudevarao, TIE , Hyderabad.
- ✘ 21st century has so far seen several new satellite services such as local-channel broadcast for Direct Broadcast Satellite service (DBS), high capacity K/Ka-band personal communication satellite (PCS) service, hosted payloads, mobile satellite services using very large deploy-able reflectors, high power hybrid satellites etc. To improve the knowledge a seminar on **Satellite Systems and Technologies** by Dr. G. Mallikharjuna Rao, Scientist-F, DRDO - Hyderabad is organized by ECE Department on 7th February 2020 to all faculty and students. This talk covered the recent developments in the areas of antenna systems for FSS, BSS, PCS, and MSS satellite communications.

FACULTY ACHIEVEMENTS

- ✘ N.Mounika attended a workshop on sensitivity, Awareness, Motivation under capacity building of women managers in Higher Education organized by UGC Women's Studies centre, K.B.N. College, Vijayawada from 3rd to 9th February,2020
- ✘ V Leela Satyanaraya acted as a resource person for Electromagnetics and transmission lines guest lecture at Eswar Engineering College, Narasaraopet on 15th February 2020.

FACULTY PUBLICATIONS

- ✘ N.Mounika, G. V. Ramanaiah, Dr. A. Ravi, R. Durga Bhavani published a paper titled “Massive MIMO user capacity under Pilot Contamination” in Journal of Information and Computational Science free Scopus journal with ISSN: 1548-7741, Volume-10 Issue-2, February- 2020.
- ✘ N.Mounika, M.sri Lakshmi charitha, V.Venkata Vinay, V.Gopi Krishna U.Akhil syam kumar, published a paper titled “Effects of hardware impairments on SE of massive MIMO systems” in Journal of Xidian University, free Scopus journal with ISSN: 1001-2400, Volume 14, Issue 3, March 2020
- ✘ N.Mounika, K. Gayatri Sowmya, G.Pavan Kalyan, Ch.Thanmai, D.Sruthi published a paper titled “RICIAN FADING EFFECT ON CELL-FREE MASSIVE MIMO” in Journal of Analysis and Computation free Scopus journal with ISSN: 0973-2861, Volume XIII, Issue III, March 2020
- ✘ N.Mounika, G. V. Ramanaiah, M.Naga Sabari published a paper titled “ADC Using Successive Approximation Method” Journal of Xidian University, free Scopus journal with ISSN: 1001-2400, April 2020
- ✘ G V Ramanaiah,L Krishna Kavya, P V Rajya Lakshmi, V Sai Kumar and SK.Shahed Ali published a paper titled "Optimal Energy Efficiency Through DPSN based 5G Network" in the International Journal of Electronics and Communication Engineering, Volume 7, Issue 3, March -2020.

STUDENT PARTICIPATION (PRIZE WINNERS)

Sl.No	Name of the Student	Name of the Event	Venue	Prize Won
1	Khedareshwar	IoT Challenge-2020	Stanley College of Engineering & Technology,Hyderabad	1 st Prize
2	Pawan Kalyan	IoT Challenge-2020	Stanley College of Engineering & Technology,Hyderabad	1 st Prize
3	Ganesh	IoT Challenge-2020	Stanley College of Engineering & Technology,Hyderabad	1 st Prize
4	Khandeswar	IoT Challenge-2020	Stanley College of Engineering & Technology,Hyderabad	1 st Prize
5	Rajeswari	Taruni Tarangalu	V R Siddarth College of Engineering,Vijayawada	1 st Prize
6	Khedareshwar	Technical fest-Circuit Hunt	Usharama college of engineering	1 st Prize
7	Khandeswar	Technical fest-Circuit Hunt	Usharama college of engineering	1 st Prize
8	Khedareshwar	Technical fest-Quiz	Usharama college of engineering	1 st Prize
9	Khandeswar	Technical fest-Quiz	Usharama college of engineering	1 st Prize
10	Khedareshwar	Technical fest-Paper Presentation	Usharama college of engineering	2 nd Prize
11	Khandeswar	Technical fest- Paper Presentation	Usharama college of engineering	2 nd Prize
12	M Aparna	Jagruthi-2020	IISc,Bengaluru	1 st Prize
13	K Dedeepya	Jagruthi-2020	IISc,Bengaluru	1 st Prize
14	T Ganasri	Crossxto	VVIT,Vijayawada	2 nd Prize
15	K Ujwala			2 nd Prize
16	K Mounika	Circuit Era	VVIT,Vijayawada	2 nd Prize
17	K Ujwala	PPT	VVIT,Vijayawada	2 nd Prize
18	Kavya Reddy			2 nd Prize

Embedded Systems and its applications Workshop



Capabilities needed for
fourth Industrial
Revolution

Smart Hackathon India
Competition

