



JCT College of Engineering and Technology





NEWSIETTER "EIECTROBUTZ"

ELECTRONICS AND COMMUNICATION ENGINEERING





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ABOUT THE DEPARTMENT

The Department Of Electronics and Communication Engineering came into existence at the faculty of Engineering in 2009 at JCT. Rapidly changing needs of telecommunication industry coupled with indispensible need for Electronics has fabricated this specific branch of recent times. Apart from the prescribed curriculum, students at JCT are kept in close contact with the industry to make them capable of taking their professional challenges with ease. The Of Electronics Department and Communication Engineering, imparts knowledge to students and nourishes them to capable engineer with high level of talent, professional ethics and creativity.

The major goal of the Department of Electronics and Communication Engineering is to produce highly knowledgeable, competent and resourceful young engineers who can perform well in a wide variety of job profiles. To achieve this, curriculum provides a strong foundation in both the analytic and technological aspects of E&C Engineering. It also provides ample opportunities to students to work on mini-projects, develop communication skills. explore internship opportunities in industry and world-class universities and take part in national and international design contests.

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY



To emerge as a Premier Institute for developing industry ready Engineers with competency, initiative and character to meet the challenges in global environment.

Mission

MISSION 🮯

- To impart state-of-the-art engineering and professional education through strong theoretical basics and hands on training to students in their choice of field.
- To serve our students by teaching them leadership, entrepreneurship, teamwork, values, quality, ethics and respect for others.
- To provide opportunities for long-term interaction with academia and industry.
- To create new knowledge through innovation and research.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION



ENGINEERING

Electronics and Communication Engineering department aims to empower the budding engineers with technological excellence to meet current and imminent challenges in creative research and employment.

MISSION (?

- To cater all necessary inputs to excel in electronics knowledge both in theory and practical.
- To develop leadership and entrepreneurship qualities with social and ethical values.
- To provide the opportunities for innovation & collaborative research with industry

PROGRAM EDUCATIONAL OBJECTIVES (PEO)

PEO1: Graduates will develop the skills and knowledge necessary to become globally competent team players and leaders in the allied fields of electronics and communication engineering.

PEO2: Graduates will develop the core technical skills and knowledge that will empower them to pursue lifelong learning and research.

PEO3: Graduates will develop and deliver innovative solutions and services that address industrial and societal challenges, while upholding ethical principles and social responsibility.

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 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 (PSO)

1. Analyze, Design, Simulate and Integrate Electronic Circuits and Systems for given specifications.

2.Apply the technical knowledge to solve complex problems in the areas like signal processing, Communication, VLSI design and Embedded Systems.



HOD MESSAGE



Dr.V.J.ARULKARTHICK

It is a great pleasure to see the creative expressions of students who had contributed to "ELECTROBLITZ". The Department Of Electronics and Communication Engineering came into existence at the faculty of Engineering in 2024 at JCT. Rapidly changing needs of telecommunication industry coupled with indispensible need for Electronics has fabricated this specific branch of recent times . Apart from the prescribed curriculum, students at JCT are kept in close contact with the industry to make them capable of talking their professional challenges with else.

The Department Of Electronics and Communication Engineering, imparts maximum knowledge to students and nourishes them to capable engineer with high level of talent, professional ethics and creativity. The major goal of the Department of Electronics and Communication Engineering is to produce highly knowledgeable, competent and resourceful young engineers who can perform well in a wide variety of job profiles. To achieve this, curriculum provides a strong foundation in both the analytic and technological aspects of E&C Engineering.

Graduate will be successful in Professional career by acquiring the knowledge in the fundamentals of Electronics and Communication Engineering and Professional Skills. The students are encouraged to engage in life-long learning and professional development by pursuing higher studies and participating in Professional organizations.

"Learning gives creativity, creativity leads to thinking, thinking provides knowledge, and knowledge makes you great."

SEMINAR



DEPARTMENT OF ELECTRONICS AND COMMMUNICATION ENGINEERING

> Dr.G.EMAYAVARAMBAN Assistant Professor, Karpagam Academia Of Education.

ORGANIZED SEMINAR ON INTRODUCTION TO SIGNAL PROCESSING

21 2024	VENUE	ME11:00AM : SEMINAR HALL
		IIIIIII.
Co ordinator Ms.A.Sindhu	HoD-ECE Dr.V.J.Arulkarthick	Principal Dr.S .Manoharan



Department of Electronics and communication Engineering and IETE organized a seminar on "INTRODUCTION TO SIGNAL PROCESSIONG" on 21.02.2024 at 11.00am in Seminar Hall. The key speaker of the event was Dr.G.EMAYAVARAMBAN Assistant Professor. Karpagam Academia of Education, Coimbatore. The session started with the welcome address by our principal Dr.S.Manoharan and introduction to the Chief guest was given by Ms.Reddygari Chethana of III B.E ECE.

Our Chief Guest delivered his lecture on the topic "Signal Processing". The primary goal of his lecture was to promote student's knowledge on "Signal Processing Techniques". He explained about Emerging Technologies in the Signal Processing. He also disussed about using machine learning to performance of wireless improve the communication systems. He encouraged students to develop the Practical Knowledge. Finally, he answered queries raised by the students and made the session as an interactive one.

SEMINAR

SUNEETHA . M

Talent Delivery, Manager, **Renesas Electronics**, Bengaluru

Principal Dr.S .Manoharan



ORGANIZES SEMINAR ON

VLSI DESIGN FOR IOT APPLICATIONS

HoD-ECE

VENUE : SEMINAR HALL DATE

14/03/2024 TIME 10:00 AM

Co ordinator Mrs.S.Mohanapriya Dr.V.J.Arulkarthick



Department of Electronics & Communication and IEEE organized Seminar **"VLSI** on DESIGN FOR IOT APPLICATIONS" on 14.03.2024 at 10.00am in Seminar Hall. The key speaker of the event was Ms.M.SUNEETHA, Manager, Renesas Electronics, Bengaluru.

The session started with the welcome address and introduction to the Chief Guest was given by Dr.V.J.ARULKARTHICK, HEAD of ECE Department. Our Chief Guest delivered his lecture on the topic "VLSI DESIGN FOR IOT APPLICATIONS". The primary goal of her lecture was to give emerging applications in VLSI Design.

She briefly explained what is VLSI Design and Innovative VLSI design methods that are essential for creating efficient IoT Applications. Finally, she answered queries raised by the students and made the session as an interactive one.

SEMTNAR



Department of Electronics and communication Engineering and ISTE organized a SEMINAR on "WERABLE TECHNOLOGY & HEALTH CARE" on 27.03.2024 at 09.30 am in Seminar Hall. The key speaker of the event was Ms.SWARNHA DEEPA, Project Manager, Silicon Labs, Coimbatore. The key speaker started session about "The Rise of Wearable Tech" and also explained about the enhanced vision for the visually impaired, providing a glimpse into a world where technology seamlessly integrates with our bodies.





Department of Electronics and communication Engineering and IETE organized a Workshop on "EMPOWERING INDUSTRIES WITH IOT" on 19.04.2024 at 09.30 am at Seminar Hall. The key speaker of the event was Mr.NAVANEETHA **KRISHNAN** Senior Associate ,Cognizant, Chennai. The session started with the welcome address by our principal Dr.S.Manoharan and introduction to the Chief guest was given by Ms.Reddygari Chethana of III B.E ECE. The key speaker given brief introduction about IOT across various industries, revolutionizing the way we connect, collect data, and make informed decisions



Electronics Department of and Communication Engineering organized a Guest lecture on "IoT ENABLED SUSTAINABLE AGRICULTURE AND FOOD SECURITY" on 20.02.2024 from 11.00A.M onwards at JCT College of Engineering and Technology, Coimbatore.The key speaker of the event was Dr.Santhosh Murthi. Co-Founder, Tech Majilis Innovations. Muscat. The session started with a welcome address and Introduction of Chief Guest was given by Prof. Thanseen Thanir (AP/ECE).

He discussed about IoT role in sustainable Agriculture. He also spoke about how Agriculture Sensors are used in IoT which compensates the lack of Man power and conservation of water. It was a very informative program and both students and faculties of ECE department had a great learning experience and got benefitted through this webinar.

Paper Publicati©ns

A competent approach for malicious attack by intrusion detecting detection system IDS

> golden search optimization based Deep learning for classification of heartbeat using ECG signals

Chronological

An enhanced trust scheduling algorithm for medical application in a heterogeneous cloud computing environment

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Mrs.VEDHA VINODHA





Patent Publications

Mrs.VEDHA VINODHA

Using of IOT and artificial intelligence technologies present the invention relates to an efficient energy consumption optimisation system for Indian house



Mrs.VEDHA VINODHA

Research methodology



S.NO	Name of Faculty	Organizing Institution
1	Vedha vinodha .D	Sri Krishna College of Engineering ∧ Technology
2	A.Sindhu	ORACLE
3	Thahaseen thahir	Hindustan College of Engineering and Technnology
4	Vedha vinodha .D	NPTEL
5	R.Poornima	TANSAM
6	R.Poornima	IBM
7	K.BABU	Sri Krishna College of Engineering ∧ Technology





EMBEDDED SYSTEM

1.ARISH M 2.BHARANI 3.BEFARIN T 4.ELAMVAZHUTHI 5.GIRIVASAN S 6.HARI RAMAKRISHNAN 7.IJAS SHADH

EMBEDDED SYSTEM

8.MUKESH S 9.PANDI VIGNESH 10.SANJAY P 11.SASITHARAN G 12.SHUBHAM KUMAR

EMBEDDED SYSTEM

13.SIJITH R 14.SIVAPRAVEEN 15.SIVASURYA S 16.SRI KANTH D 17.SONU KUMAR







PCB DESIGN

1.GUNAPRIYA T 2.DIVYA S 3.PREMA S 4.VETRI SELVI V **ROBOTICS**

1.P GOWTHAM REDDY 2. CHARAN 3.KUSHMANTH REDDY 4.R BALATEJA 5.NANDEESWAR

	INTERNSHIP
<section-header></section-header>	 1.PORULCEHLVAN 2.ARVIND GANESH 3.SUDARSHAN 4.AATHAVAN 5.MOHAN SETHUPATHI 6.TEJA 7.VENKATESH 8.NAFIYA 9.MANISHA 10.CHETHANNA 11.SIDDHIQ 12.KARTHIKEYAN 13.THIRUMOORTHI 14.SRIRAM 15.AADARSH 16.VISHNU 17.JAGADEESH 18.MALLA REDDY
EMBEDDED SYSTEM	1.DINESH 2.SANJAY 3.DASTAGIRI
ROBOTCIS & AUTOMATION	1.VENKATESH 2.BHANU PRAKASH

SPORTS ACTIVITES







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