CARE
COLLEGE OF ENGINEERING

ELECTRONICS AND COMMUNICATION ENGINEERING

Proudly Presents

ECE BUZZ

NEWSLETTER

DECEMBER 2020 | ISSUE 02

EDITOR JANANI B | SANJAY N

VISION AND MISSION

VISION OF THE INSTITUTION

Transform lives through Education and Research

MISSION OF THE INSTITUTION

To impart quality education to students through critical thinking, creativity, leadership and the spirit of entrepreneurship

VALUES OF THE INSTITUTION

We develop in each member the ability and passion to work effectively for the betterment of humanity with cultural awareness, high ethical and moral values and a sense of social responsibility

DEPARTMENT VISION

To produce globally competent Electronics and Communication Engineers.

DEPARTMENT MISSION

M1 : To Impart Value-based Technical Education with a state of art technologies to meet industry standards.

M2 : To foster critical thinking and creativity through research and experimentation.

M3 : To prepare our students to be a lifetime professional with Creativity and Leadership.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO 1 - Shall pursue higher education and research, or have a successful career in industries or as entrepreneurs.

PEO 2 - Shall have the ability and attitude to adapt to emerging technological changes.

PEO 3 - Shall exhibit leadership abilities, professional ethics, communication skills, interpersonal skills and life-long learning.

PROGRAM OUTCOMES (POs)

PO1 - Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2 - 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.

PO3 - 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.

PO4 - 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.

PO5 - 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.

PO6 - 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.

PO7 - 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.

PO8 - Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9 - Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10 - 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.

PO11 - 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.

PO12 - 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 OBJECTIVE (PSOs)

Students of the Electronics and Communication Engineering Program

PSO 1 - Shall have Potential to analyze, design, synthesize and provide technical solutions in the field of VLSI, Embedded Systems, Communication, Networking and Real Time Processing.

PSO 2 - Shall exhibit leadership skills and pursue entrepreneurship and contribute in the field of Electronics and Communication Engineering.

ECE – FUTURE OF ENGINEERING

The future of Electrical and Computer Engineering (ECE) is poised for groundbreaking advancements. As technology continues to evolve, ECE engineers will play a pivotal role in developing innovative solutions for smart cities, renewable energy, autonomous systems, and advanced communication networks. The integration of artificial intelligence, quantum computing, and internet of things (IoT) will drive unprecedented growth in fields like robotics, healthcare, and sustainable technology. ECE professionals will lead the way in creating cutting-edge applications, ensuring a connected and efficient world.

CARE
COLLEGE OF ENGINEERING

ECE
FUTURE OF ENGINEERING

DATE
26 / 06 / 2020

TIME
11.00 a.m

KEY TAKEAWAYS

* To Understand the Scope and Applications of Electronics Engineering.

* To Know the Emerging and Trending Technologies.

* To Know the Specialized Areas Where Electronics Applied for?

* To Know the Unique Career Options Available in Govt/ Private Sector Companies.

For Free Registration
SMS or Whatsapp "ECE" to
91769 45000

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WEBINAR ON MICROWAVE ENGINEERING

Department of Electronics and Communication Engineering conducted a webinar on "Microwave Engineering" for the IV year and III year ECE students on 29th August, 2020.

The webinar was delivered by Dr. Immaculate Rosline, Assistant professor, Ramaiah Institute of Technology, Bangalore.

CSE & ECE STUDENTS ASSOCIATION INAUGURATION
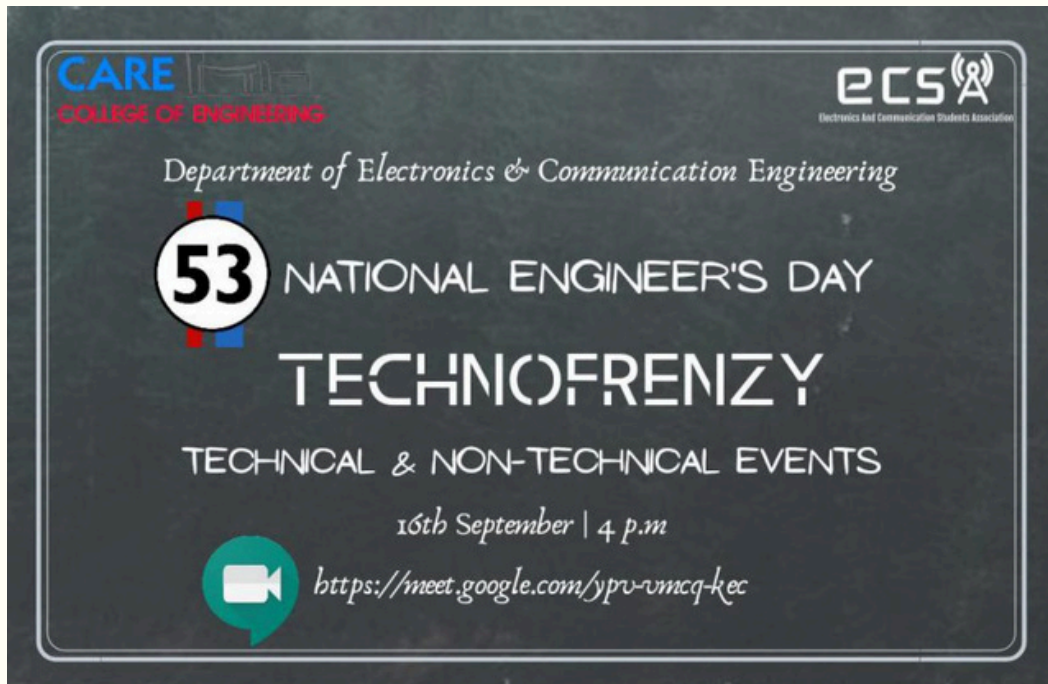
Department of Electronics and Communication Engineering and Department of Computer Science engineering, inaugurated the IEEE Student Branch, on 11.sep.2020 at 11.A.M through Google Meet.

DR. A.Pasumpon Pandian, Dean R&D delivered the Presidential address, Shri. B.Prative Chend, CEO, CARE Group of Institutions delivered the Felicitation address and gave the inaugural address. Dr. S.Shanthi, Principal, CARE College of Engineering

TECHNOFRENZY – AN INTRA DEPARTMENT CONCLAVE

Department of Electronics and Communication Engineering celebrated "Technofrenzy – An Intra Department conclave" on the remembrance of the 53rd National Engineer's Day. As a part of this conclave, several Technical and Non-Technical Events were conducted on September 16, 2020 successfully. All the ECE students were actively participated and enjoyed.

AN INTERACTIVE SESSION ON IOT

Department of ECE conducted a webinar on "An interactive session on IOT" a knowledge sharing activity held on 26 & 27 September 2020. All the ECE students actively participated and shared their knowledge.

WEBINAR ON DIGITAL SIGNAL PROCESSING

Department of Electronics and Communication Engineering conducted a webinar on "Digital Signal Processing" for the ECE students on 24th October , 2020. The webinar was delivered by Dr. Muthulakshmi, Professor, Dr.NGP Institute of Technology, Coimbatore.

WEBINAR ON RECENT CHALLENGES IN BIOMEDICAL IMAGE PROCESSING

Department of Electronics and Communication Engineering organized an Online webinar on "Recent Challenges in Biomedical Image Processing" on 27/10/2020

Resources person: Dr. S.Mary Praveena, Associate Professor, Sri Ramakrishnan institute of Technology, Coimbatore.

Event Coordinators:

Dr.J.Jeyarani, HOD/ECE

Ms.R.Vanitha, AP / ECE

TECHNOFRENZY V3.O

Department of Electronics and Communication Engineering along with ECSA student association organized a fun filled event "TechnoFrenzy V3.O" on 24/11/2020. Students organized fun events and enjoyed themselves.
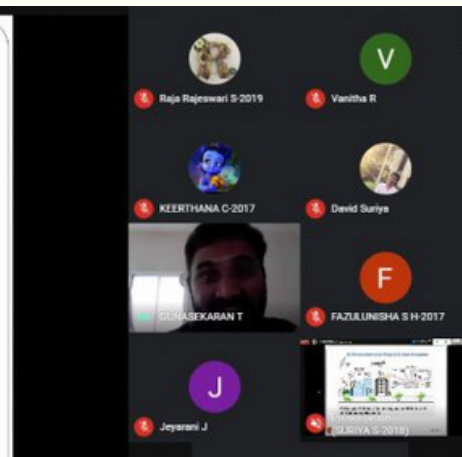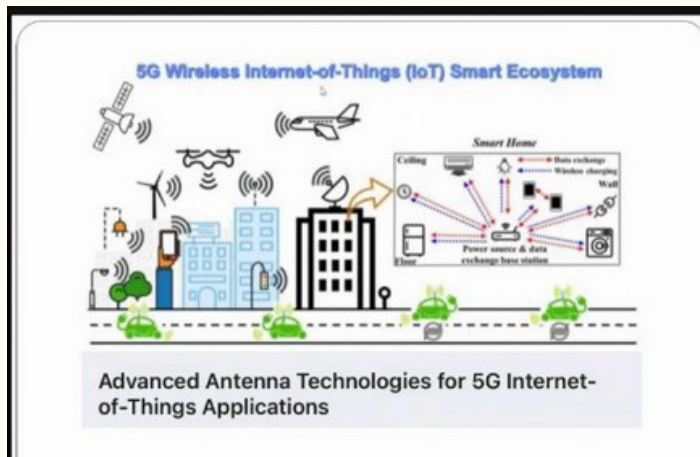
Online Webinar on 5G & RF Antennas

Department of Electronics and Communication Engineering organized an Online Webinar "5G & RF Antennas" 12th December 2020. The session was handled Dr.Gunasekaran Thangavel, Program Director, Telecommunications Engineering, Electrical and Electronics Engineering Section, University of Technology & Applied Sciences, Muscat, Oman. Dr.Gunasekaran Thangavel have a strong knowledge in antenna design and he has published many papers in that area. He is more passionate in interacting with the student community. During the session, he gave brief content about RF antennas, NR (New radio), 5G and 6G antenna technologies. II, III and IV Electronics and Communication Engineering students attended the webinar and get benefited.

STAFF ACHIEVEMENTS

- **Mr. Sriram Sundar S, Assistant Professor attended the AICTE Sponsored One Week Online Short Term Training Programme on "Cyber Physical Systems (CPS) Design Techniques and Applications organized by Electronics and Communication Engineering Department, Kalasalingam Academy of Research and Education, Krishnankoil, Tamil Nadu from 27th July 2020 to 1st August 2020 and scored 97% in the assessment conducted during the STTP**

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- **Mr. Sriram Sundar S, Assistant Professor attended AICTE Sponsored Six Days Short Term Training Programme on "Soft Computing Techniques in Engineering Applications" organized by Department of Electronics and Communication Engineering, Syed Ammal Engineering College, Ramanathapuram during 20.07.2020 – 25.07.2020.**

- **Dr.J.Jeyarani, HOD/ECE, attended the Online FDP Programmme on "'Antenna applications & Microwave Design" organized by Electronics and Communication Engineering Department, Sri Sairam Institute of Technology, Chennai from 15th June to 20th June 2020.**

- **R.Vanitha, Assistant Professor/ECE , attended the Online FDP Programmme on "'Antenna applications & Microwave Design" organized by Electronics and Communication Engineering Department, Sri Sairam Institute of Technology, Chennai from 15th June to 20th June 2020.**

- **Dr.J.Jeyarani HOD/ECE, has attended One Day Webinar on Emerging Technology Trends in Life" Organized by Kings College of Engineering on 6.6.2020**

STAFF ACHIEVEMENTS

- K. Rubitha, Assistant Professor/ECE, attended Two Days Online FDP Programmme on "MEMS Sensors" organized by Electronics and Communication Engineering Department in association with Ministry of HRD & IEEE Student Branch, Rajalakshmi Engineering College, Chennai from 14th August to 15th August 2020.

- K. Rubitha,Assistant Professor/ECE , attended the Online FDP Programmme on "'Antenna applications & Microwave Design" organized by Electronics and Communication Engineering Department, Sri Sairam Institute of Technology, Chennai from 15th June to 20th June 2020.

- R.Vanitha, Assistant Professor/ECE ,attended the Online FDP Programmme on "'Antenna applications & Microwave Design" organized by Electronics and Communication Engineering Department, Sri Sairam Institute of Technology, Chennai from 15th June to 20th June 2020

- Dr.J.Jeyarani, HOD/ECE, attended the Online FDP Programmme on "'Antenna applications & Microwave Design" organized by Electronics and Communication Engineering Department, Sri Sairam Institute of Technology, Chennai from 15th June to 20th June 2020

- Mr. Sriram Sundar S, Assistant Professor attended AICTE Sponsored Six Days Short Term Training Programme on "Soft Computing Techniques in Engineering Applications" organized by Department of Electronics and Communication Engineering, Syed Ammal Engineering College, Ramanathapuram during 20.07.2020 – 25.07.2020

- R.Vanitha – Assistant professor participated in Online Faculty Development program conducted by Sai ram Institute of technology m on" Antenna Applications and Microwave design" on June 15th to June 25 2020

STAFF ACHIEVEMENTS

- **Dr.J.Jeyarani HOD/ECE, attended the Online FDP Programmme on Antenna applications & Microwave Design" organized by Electronics and Communication Engineering Department, Sri Sairam Institute of Technology Chennai from 15th June to 20th June 2020.**

- **R.Vanitha, Assistant Professor/ECE , attended the Online FDP Programmme on "'Antenna applications & Microwave Design" organized by Electronics and Communication Engineering Department, Sri Sairam Institute of Technology, Chennai from 15th June to 20th June 2020.**

- **K. Rubitha, Assistant Professor/ECE , attended the Online FDP Programmme on "'Antenna applications & Microwave Design" organized by Electronics and Communication Engineering Department, Sri Sairam Institute of Technology, Chennai from 15th June to 20th June 2020**

- **K. Rubitha, Assistant Professor/ECE,attended Two Days Online FDP Programmme on "MEMS Sensors"organized by Electronics and Communication Engineering Department in association with Ministry of HRD & IEEE Student Branch,Rajalakshmi Engineering College, Chennai from 14th August to 15th August 2020.**

- **R.Vanitha − Assistant professor attended AICTE Sponsored Six Days Short Term Training Programmeon"Potential Benefits of RFID in Industrial, Medical and Domestic Sectors" (phase- I) organized by Department of Electronics And Communication Engineering, Syed Ammal Engineering College, Ramanathapuram during 23.11.2020 − 28.11.2020.**

- **K.Rubitha,AP/ECE , has attended AICTE Sponsored Six Days Short Term Training Programme on "Potential Benefits of RFID in Industrial, Medical and Domestic Sectors" (phase- I)organized by Syed Ammal Engineering College, Ramanathapuram during 23.11.2020 − 28.11.2020.**

STAFF ACHIEVEMENTS

- S.SriramSundar AP/ECE, has attended AICTE Sponsored one week STTP on Empowering the moral values , ethics and behavioural attitude in teaching skills among teachers organised by Dr.NGP Institute of tech, during 1.12.2020 to 7.12.2020.

- S.SriramSundar AP/ECE, has attended STTP on Recent Trends & Application in Digital VLSI Design organized by Priyadarshini College of Engg during 14.12.20 – 19.12.20.

- M.Shivashankari, AP/ECE, has attended One week webinar on meramaterial antennas for 5G & MIMO Applications, organized by Tesla minds, during 14.12.2020 to 20.12.2020.

- M.Shivashankari, AP/ECE, has attended one day webinar on Influence of Radome design on antenna performance organized by Tesla minds, 10.12.2020.

- Dr.J.Jeyarani, HOD/ECE, has attended one day webinar on Pursuit of Excellence: Institution Building organized by IISER, Tirupati, on 12.12.2020

- S.SriramSundar AP/ECE, has attended AICTE Sponsored Six Days Short Term Training Programme on "Potential Benefits of RFID in Industrial, Medical and Domestic Sectors"(Phase II) organized by Syed ammal Engg college during 21.12.20 to 27.12.20.
- Dr.J.Jeyarani, HOD/ECE, has attended AICTE ISTE Approved refresher programme on data science analytics and visualization tools organized byShankaracharya tech campus during 21.12.2020 to 26.12.20.

- S.SriramSundar AP/ECE, has attended AICTE Sponsored Six Days Short Term Training Programme on "Potential Benefits of RFID in Industrial, Medical and Domestic Sectors"(Phase II) organized by Syed ammal Engg college during 21.12.20 to 27.12.20.

STAFF ACHIEVEMENTS

J.Jeyarani, HOD/ECE, has attended one day webinar on Demystifying 5G NR test features for Mobile Network Operators(MNOs) organized byKeysight Technologies on 13.1.2021.

J.Jeyarani, HOD/ECE, has delivered lecture on "AICTE sponsored FDP on Research challenges & issues in wireless communication & networks" organized by Sri Ramakrishna Institute of Technology on 12.2.2021.

STUDENTS ACHIEVEMENTS

B.Janani- final year ECE

- Completed certificate course in University of California, Irvine in the title the raspberry pi platform and python programming for Raspberry pi.
- Completed certificate course in University of California, Irvinein the title Introduction to Internet of things and embedded system
- Completed certificate course in University of California, Irvine in the title Interfacing with raspberry pi
- Completed certificate course in University of California, Irvine in the title"The Arduino Platform and C Programming"
- Completed certificate course in University of California, Irvine in the title"The Programming for Internet of things project"
- Completed six coursed in Coursera online noncredit specialization "An introduction to programming the internet of Things
- Completed certificate course in Google cloud,in the title"Industrial IoT on Google Cloud Platform"

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Aarthi – IV Year ECE

- Completed certificate course in Google cloud,in the title"Machine Learning for Business Professionals"
- Completed certificate course in Google Analytics Academy on titled "Google Analytics for Beginners"

STUDENTS ACHIEVEMENTS

S.SURIYA,ECSA PRESIDENT – IV ECE
- Attended more than 50+ online webinars in the field of Python programming, Machine learning, Data Science, Artificial Intelligence, Deep Learning & Internet of Things from various companies like Pantech Ltd, Let's Talk WAC, NIT Kharagpur-STEP, IETE Mumbai, Adamas University etc…Some of them are
- Conversational Bot Design
- IOT Applications with Microsoft Asure

K.SHIFANA BEGUM – IV ECE
- Attended 5+ webinars in Pantech Ltd such as
- SLAM Robotics
- AI based Object Detection
- Brain Wave Controlling Robots
- Python programming & it's applications etc.
- Attended three days workshop on 'Python programming for Beginners' by International Journal of Novelty Research in Science, Engineering & Technology, Salem.

DIVAKAR – IV ECE
1.Completed online certification course "Python for Machine Learning" by Great Learning.
- Completed online certification course "Java tutorial for beginners" by Skillzcafe.
- Serving as NSS Volunteer for the past 5 years.
- Attended internships in the domain IOT & AI such as
- Robotics – Pantech ProEd private Ltd.
- Artificial Intelligence – Pantech E-learning.

V.BALAKRISHNAN – IV ECE
- Attended internship in Techvolt Company, Coimbatore in the topic "IOT".
- Started a Youtube channel in this second lockdown named "Bala's food".

P.NAGARAJAN – IV ECE
1.Attended internships in the domain IOT & AI such as
- Robotics – Pantech ProEd private Ltd.
- Artificial Intelligence – Pantech E-learning.

STUDENTS ACHIEVEMENTS

N.LAKSHMI PRIYA – IV ECE

1.Attended more than ten webinars in Pantech Ltd such as

- Recent Trends in Power Electronics using MATLAB
- Deep Learning using Python
- Raspberry Pi with OpenCV
- Electric Vehicle Design
- Trends & Technologies in VLSI etc…

2.Attended internships in the domain IOT & AI such asRobotics – Pantech ProEd private Ltd.

- IOT using Machine Learning – Allytech
- Artificial Intelligence – Pantech E-learning.
- Recent Trends in Power Electronics using MATLAB
- Deep Learning using Python
- How the Agri & IOT get connected

R.BHAKKIYA,ECSA SECRETARY – IV YEAR

- Attended 10+ webinars in Pantech Ltd such as
- Recent Trends in Power Electronics using MATLAB
- Deep Learning using Python
- How the Agri & IOT get connected

NISHANTH – III ECE

- Attended a webinar on "Different Methods to Characterize or test the antenna" by Tesla Minds, Chennai.
- Completed two week value added course on "Automation Using Sensors" by Siemens centre of Excellence, Trichy.
- Completed 5+ courses on Coursera. Such as
- Strategic Innovation: Building and Sustaining
- Write Professional Emails in English
- Programming for Everybody (Getting Started with python)
- Introduction to Philosophy

VIJEI – III ECE

- Completed two week value added course on "Automation UsingSensors" by Siemens centre of Excellence, Trichy.
- Attended a webinar on "Beginners in RF Design" conducted byTesla Minds, Chennai.

STUDENTS ACHIEVEMENTS

GUNASEKARAN – III ECE
- Completed two week value added course on "Automation UsingSensors" by Siemens centre of Excellence, Trichy.
- Attended a webinar on "Different Methods to Characterize or test the antenna" by Tesla Minds, Chennai.

AJAY KUMAR – III ECE
- Completed two week value added course on "Automation Using Sensors" by Siemens centre of Excellence, Trichy.

NITHYA – III ECE
- Completed two week value added course on "Automation Using Sensors" by Siemens centre of Excellence, Trichy.

CITYBABU – III ECE
- Completed two week value added course on "Automation Using Sensors" by Siemens centre of Excellence, Trichy.

DHINAKARAN – III ECE
- Completed two week value added course on "Automation Using Sensors" by Siemens centre of Excellence, Trichy.

G.VIGNESHWARAN – II ECE
- Won third place in Divisional level badminton tournament in 2021.
- Completed Internship in Ally tech on the title "Core Based Technologies"

M.AFROSE JAMILA– II ECE
Completed Internship in Ally tech on the title "Core Based Technologies"

D.ANANDHACHANDRU-II ECE
Completed Internship in Ally tech on the title "Core Based Technologies"

K.BALAMURUGAN-II ECE
Completed Internship in Ally tech on the title "Core Based Technologies"

R.JANCY RANI-II ECE
Completed Internship in Ally tech on the title "Core Based Technologies"

S.KRISHNAMOORTHI-II ECE
Completed Internship in Ally tech on the title "Core Based Technologies"