DECEMBER 2020

DEPARTMENT NEWSLETTER

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

JYOTHI ENGINEERING COLLEGE

Vision: - To become a centre of excellence in electrical and electronics engineering through high quality technical education with an emphasis on holistic excellence.

Mission: - To inculcate ethical professionalism through value based quality education as to equip the students with appropriate skills for a meaningful career and holistic excellence and promote creative engineering ideas for the benefit of the society.

Programme Educational Objectives:-

1) Graduates shall have a good foundation in the fundamental and practical aspects of Mathematics and Engineering Sciences to build successful and enriching careers in the field of Electrical Engineering and allied areas.

2) Graduates shall learn and adapt themselves to the latest technological developments in the field of Electrical & Electronics Engineering which will, in turn, motivate them to excel in their domains and shall pursue higher education and research.

3) Graduates shall have professional ethics and good communication ability along with entrepreneurial skills and leadership skills so that they can succeed in multidisciplinary and diverse fields.

Program specific outcomes:-

Graduates possess

1) Ability to have good foundation in theoretical and practical aspects of Electrical & Electronics Engineering.

2) Ability to model, analyze, design and realize physical systems, components or processes thereby adapt themselves to the latest research and developments in the field of Electrical & Electronics Engineering.

3) Ability to communicate and work professionally as well as take up entrepreneurial endeavours in the field of Electrical Engineering and allied areas for the benefit of the society.

Programme Outcomes:-

• 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 considerations.

• 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.

• 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.

• 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.

• 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.

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

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

• 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.

• 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.

• 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.

FACULTY ACHIEVEMENTS

- Congratulations to DR. Nisha P.V for achieving the degree of Doctor of Philosophy on the topic “ANALYSIS OF ELECTROMAGNETIC INTERFERENCE IN POWER ELECTRONIC BASED SYSTEMS AND THEIR MITIGATION METHODS”.
- Dr.Shijoh V acted as resource person for the online FDP on Accreditation Process-The way forward at Government Polytechnic College, Chelakkara on 28/7/2020.
- Dr.Shijoh V presented a Webinar on Introduction to NBA Accreditation at Albertian Institute of Management, Kochi on 23/7/2020.
- Mr.Jithin K Jose acted as a committee member for the evaluation of the online Hackathon 'MedHack 2020' organized by IEEE-IA/IE/PELS Jt.chapter Kerala on 9th August 2020.
- Mr.Jithin K Jose acted as a panel member in selecting the Best Event Report among the PELS student Branch chapters in Kerala, conducted in connection with the PELS Day Celebrations 2020.
- Mr.Jithin K Jose presented a Webinar on Industrial Automation for the students of Vimal Jyothi Engineering College, Kannur.
- Mr.Jithin K Jose was elevated as IEEE Senior Member the highest grade for IEEE members, an honor bestowed only to those who have made significant contributions to the profession.
- Mr.Jithin K Jose was selected as Kochi Representative for IEEE IA/IE/PELS joint chapter Kerala Section, Professional Execom for the fourth time.
- Mr. Jithin K. Jose delivered a session on "Unleashing the Mind Power" for the First Year B.Tech students of Mar Baselios Christian College of Engineering and Technology, Kuttikkanam, Idukki, Kerala on 4th December 2020.

STUDENTS ACHIEVEMENTS

- Kapildev M.K, Mansoor K.U, Sahal K.H and Jithin K. Jose(Mentor) had participated in IEEE-IAS sponsored All Kerala Project Competition and had won the Third prize for their project titled " Gesture Aid Gloves ".
- Kapildev M.K, Sahal K, Mansoor K.U and Jithin K. Jose(Mentor) had achieved the honourable award under the Makerfair track for their project titled " Patient Communication Aid Without Sign Languages".
- Edwin Joseph, Giyo George K, Joseph P.K, and Jithin K. Jose(Mentor) had won the first prize in the IEEE-IAS sponsored All Kerala Project Competition for their project titled " Head Controlled Wheel Chair With Patient Monitoring System ".
- Telma Johnson of S4 PG published a paper on "Novel State Disturbance based Multi-Level Inverter with Sliding Mode Control", In proc of ICDICI-2020, Tiruelveli, India, 8-9 July 2020.
- EP Shahina and K Aravind of S4 PG, presented a paper on “THD Reduction in Execution of A Nine Level Single Phase Inverter” in International Conference on Communication and Signal Processing (ICCSP) 2020.
- C Greeshma, EP Shahina of S4 PG, presented a paper on A PV based Microinverter with Bidirectional Battery Charging Application in the Input Stage in International Conference on Communication and Signal Processing (ICCSP) 2020.
- Ms.Amritha Ashok K., Ms.Anitta Savy, Mr.Benhur K. Babu, Ms.Sneha J. P of S7 EEE , got funding from Center for Advanced Technologies in Disaster Management (CATDM), CUSAT for their project “Automatic Flood Detection & Electrical Isolation System(AFDEIS)” .

IEEE & IEEE-IAS EVENTS

- Webinar on “New Trends in Lighting Design” was held by Adhitya S., Assistant Manager-Operations, Sodfos Engineering Consultancy. The resource person shared the details regarding all the chances and opportunities and have suggested various courses which help to learn in the area of designing.
- Webinar on “Introducing IEEE Member benefits, Resources, and Opportunities” was held by was Dr. Chun Che Lance Fung, Emeritus Professor, Murdoch University. The resource person shared the details regarding all the chances and opportunities in IEEE and its various societies.
- Webinar on “Renewable Integration in the Grid Challenges and Opportunities” was held by Dr. Abhijit Kshirsagar, Professor, IIT Dharwad. The resource person shared the details regarding all the chances and opportunities in renewable energy. He also shared how to select research areas if looking for research.

WEBINAR CONDUCTED BY IE(I)

- Webinar on “KSEB Electricity Billing Myths &Facts” was held by was KK Dileepkumar, Asst. Engineer KSEB. This webinar helped many to know about the basics about the Electricity Billing and how we can reduce the Bill amount.

ALL KERALA PROJECT COMPETION

- All Kerala Project competition is conducted on 6th December 2020 in online mode. After the initial screening 16 team were selected for the final presentation. The All Kerala Project Competition was jointly organized by IEEE IA/IE/PELS Jt. Chapter Kerala Section, IEEE SB Jyothi Engineering College, IAS SBC Jyothi Engineering College & IEDC Jyothi Engineering College in association with Department of Electrical and Electronics Engineering, Jyothi Engineering College.
- The winners of the competition are
- First Prize – Rs. 15000

  Team Vanguards from Jyothi Engineering college, for the project Head Controlled Wheelchair With Patient Monitoring System. The team members are Mr. Joseph P. K., Mr. Giyo George K., Edwin Joseph.
- Second Prize – Rs. 10000 shared by two teams.

  Team Electricalzz from College of Engineering, Perumon, for the project UVOS (Ultraviolet Ozone Sterilizer). The team members are Ms. S. Gayathri, Mr. Harikrishnan V. S., Mr. Anandu Balachandran.

  Team EEEians from Amal Jyothi College of Engineering, for the project Organic Dielectric from water Hyacinth. The team members are Mr. Joseph P. Devassia, Mr. Jestin Thomas, Ms. Linta Anna Baby.
- Third Prize – Rs. 5000

  Team Moksha from Jyothi Engineering College, for the project Gesture Aid Gloves. The team members are Mr. Kapildev M. K., Mr. K. U. Mansoor, Mr. Sahal K. H.

UNIVERSITY TOPPERS

M.Tech Power Electronics

Shahina E. P.
CGPA 7.82

Greeshma C.
GPA 7.61.

Telma Johnson
CGPA 7.6

S8, EEE

John Jose
SGPA 10

Albin Joy
SGPA 9.5

S6, EEE

Sneha J. P.
SGPA 10

Amrita Ashok K.
SGPA 9.91

Anitta Savy
SGPA 9.87

S4, EEE

Rahul S. S.
SGPA 9.46

Anleya Anto
SGPA 8.96

Saraswathy Bose
SGPA 8.63