



E-SHOTS

Hawaiian Electric Proposes Plan for Modernizing Grids

With the next generation of the energy grid, customers will have more information to control their electric bills. More renewable energy will be integrated, producing and delivering power will be more cost-efficient, and power outages will be restored faster.

The companies are requesting permission to install smart grid technology for more than 455,000 customers on Oahu, Hawaii Island and in Maui County. The project will consist of a modern wireless communication network, smart meters and enhanced technology that will upgrade the existing electric grid to be more automated and energy efficient. The system will improve outage detection and restoration. In addition, smart meters will provide electricity usage information to help customers better manage their bills



NEWSLETTER includes Articles on

- ☞ Palm oil insulation could transform transformers*
- ☞ Vision, Mission, PEOs, POs and PSOs*
- ☞ Gate Corner*
- ☞ Quote*
- ☞ Events happened in the department*
- ☞ Achievement by the faculty members*
- ☞ Student achievements*
- ☞ Placement record*

**January,
February,
March 2016,
7th Edition
Issue 6**

VISION OF THE DEPARTMENT

- ❖ *“To make the Department of Electrical and Electronics Engineering of this Institution a unique of its kind in the field of Research and Development activities in this part of world”.*

MISSION OF THE DEPARTMENT

- ❖ *“To impart highly innovative and technical knowledge in the field of Electrical and Electronics Engineering to the urban and unreachable rural student folks through Total Quality Education”.*

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- 1. To provide basic knowledge in Physics, Chemistry, Mathematics and necessary foundation in various concepts of Electrical and Electronics Engineering.*
- 2. To impart training to enable the students to envisage the real time problems related to the field of Electrical and Electronics Engineering and allied areas faced by the Industries so as to model, analyze and provide appropriate solutions.*
- 3. To provide an academic environment for the students to develop team spirit, leadership qualities, communication skills and soft skills.*
- 4. To motivate students to prepare for competitive examinations enabling them to pursue higher studies thereby promoting research and development activities.*

❖ PROGRAM OUTCOMES (POs)

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization for the solution of electrical and electronics engineering problems.
- 2. Problem analysis:** Identify, formulate, research literature, and analyze electrical and electronics engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions:** Design solutions for problems in the field of electrical and electronics engineering and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and 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 electrical and electronics 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 electrical and electronics engineering activities with the engineering community and with the 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 OUTCOMES (PSOs)

- a. Ability to design and solve problems in the field of electrical and electronics Engineering by applying the knowledge acquired from circuit and field theory, control theory, electric power systems, analog electronics and other allied topics.
- b. Ability to understand the recent technological developments in electrical and electronics engineering and develop products to cater the societal and industrial needs.



GATE CORNER

1) A three-phase, 4pole, self excited induction generator is feeding power to a load at a frequency f_1 . If the load is partially removed, the frequency becomes f_2 . If the speed of the generator is maintained at 1500 rpm in both the cases, then

- (A) $f_1 f_2 > 50\text{Hz}$ and $f_1 > f_2$
- (B) $f_1 < 50\text{Hz}$ and $f_2 > 50\text{Hz}$
- (C) $f_1 f_2 < 50\text{Hz}$ and $f_2 > f_1$
- (D) $f_1 > 50\text{Hz}$ and $f_2 < 50\text{Hz}$

Answer: (C)

Exp: Initially self excited generator supply power to a load at f_1 . If load is partially removed then slightly speed increase, also frequency f_2
 $f_2 > f_1$

But both cases $f_1 f_2 < 50\text{Hz}$

2) Which of the following is an invalid state in an 8-4-2-1. Binary Coded Decimal counter

- (A) 1 0 0 0 (B) 1 0 0 1 (C) 0 0 1 1 (D) 1 1 0 0

Answer: (D)

Exp: In binary coded decimal (BCD) counter the valid states are from 0 to 9 only in binary system 0000 to 1001 only. So, 1100 in decimal it is 12 which is invalid state in BCD counter.



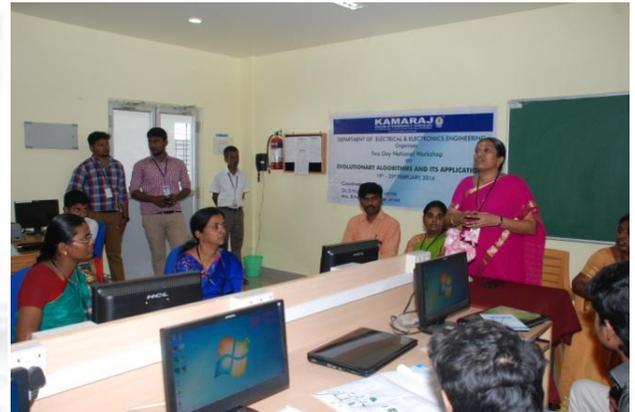
QUOTE

“Education is the most powerful weapon we can use to change the world” -

NELSON MANDELA



EVENTS HAPPENED IN THE DEPARTMENT



Two Day National Workshop on “Evolutionary Algorithms and its Applications” During 19th & 20th February, 2016.



A special guest lecture on “Awareness for IES exam” was conducted on 20th February, 2016. The resource person of the guest lecture was Mr. G.Karmegam, Race Institute, Madurai.



Our alumnus Mr.E.Balamurugan gave guest lecture on the topics “Awareness for GATE exam and Solar Power generation” 10th February, 2016

A special guest lecture on “Introduction on LTSPICE” was conducted on 17th February, 2016. The resource person of the guest lecture was Mr. S.Jegan AP/EEE.



Technical Seminar Presentation on JAVA given by, Mr.Munieswaran.N, Head of Quality, Process and Placements,NIIT on 18th March, 2016

A special guest lecture on “PLC & DCS with Siemens PLC demo” was conducted on 3rd March 2016. The resource person of the guest lecture was Mr. B.Chandru, Race Institute, Madurai.

Our alumnus Mr.M.Muthupandi, Manager, Rare India private limited gave guest lecture on the topic “Demo on **Multisim software and CRO**” on 29th March, 2016

TWO DAY NATIONAL Workshop on "Power System Transients" was conducted on 29th & 30th March, 2016. The resource person of the workshop was **Dr.A.Srinivasan,Prof/EEE, Sethu Institute of Technology**



ACHIEVEMENT BY THE FACULTY MEMBERS

- Renewal of Centre for Research of EEE has been successfully approved by Anna University, Chennai. The renewal is valid upto June 2018.

STUDENT ACHIEVEMENTS



- Mr.Manoj.T & Ms.R.V.Prathiba of IV EEE underwent the internship at Data Patterns Pvt.Ltd from 10th February, 2016.
- Ms.R.V.Prathiba of final EEE got GATE mark of 29.23 and gate score of 397 and all India rank of 12528.
- Mr.M.Saravana Kumar of final EEE got GATE mark of 27.09 and gate score of 372 and all India rank of 14801.
- Mr.B.Praveen kumar of Second year Power Systems Engineering got GATE mark of 22.98 and gate score of 325 and all India rank of 20502.



PLACEMENT RECORD

- Vasanth P , Saravana Kumar M are placed in the TESSOLVE held on 07.01.16
- Vasanth P , Muthu Subbiah A, Saravanan M, Hariprakash P, S.Francis Ignacious Ruban, Krishna Devi M, Kruthiha Subramanian, Padmini Suriyaraj,

R.Renuga Devi are placed in the CTS held on 09.02.16

- Diwakaar Vairavel K, Jothika Deepthi M, Mahendran M, Deepa B, Muthusharmila R, S. Sahithyaa, P.Akshay David, are selected in the SUTHERLAND drive conducted on 18.02.16
- Sharmathi.S.P and Poorna arunthilak.A are selected in SUTHERLAND drive (Non-Voice category) conducted on 18.02.16
- Deepa B is placed in the FACE drive on 19.02.16
- Vasanth P, M.Soorya Prakash, Muthu Subbiah A, Ms.R.Reenu of final year EEE are placed in the IVTL drive on 08.03.16
- N.Dharanidharan, Diwakaar Vairavel K, M.Mari Muneeswaran, J.Jega Maya Devi are placed in the TCS drive on 17.03.16
- Madhu shri .J, Divya Bharathi.S, Maharajothi swaroopan.R are placed in the Beehive communication on 29.03.2016

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