

GOVERNMENT COLLEGE OF ENGINEERING BARGUR - 635104

#### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

#### NEWS LETTER (JAN-MAR 2015)



#### VISION:

To be a center of new ideas and innovations by providing quality education in the field of Electrical and Electronics Engineering. MISSION:

To provide an environment in which new ideas and research thrive and from which the leaders and innovators of tomorrow emerge.

The organized events in our department are,

- Technical Workshops
- National Level Technical Symposium
- TEQUIP II Sponsored Students training programme
- TEQUIP II Sponsored Faculty Development programme
- Industrial Visits Programme



#### WEBSITE:www.gcebargur.ac.in

#### PROGRAMME EDUCATIONAL OBJECTIVES:

PEO 1. Apply a broad, fundamental based knowledge and up-to-date skills required in performing analysis and synthesis in Electrical and Electronics Engineering.

PEO 2. Design works pertaining to Electrical and Electronics Engineering using basics of circuits, incorporating the use of design standards, realistic constraints and consideration of the economic, environmental and social impact of the design.

PEO 3. Use modern computer software tools to analyses and solve Electrical and Electronics Engineering problems and explain and defend their solutions and communicate effectively using graphic, verbal and written techniques to all audiences, and pursue lifelong learning and research.

#### PROGRAM OUTCOMES:

- An ability to apply knowledge of mathematics, science, and engineering,
- An ability to design and conduct experiments, as well as to analyze and interpret data,
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- An ability to function on multidisciplinary teams,
- An ability to identify, formulate, and solve engineering problems,
- An understanding of professional and ethical responsibility,
- > An ability to communicate effectively,
- The broad education necessary to understand the impact of engineering solution in a global, economic, environmental, and societal context,
- A recognition of the need for, and an ability to engage in life-long learning,
- > A knowledge of contemporary issues,
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice,
- With basic understanding of electrical and electronics principles students can become a member and then a team leader to manage innovative projects





### Prof. K. SUBATHRA, M.E.,

### **CHIEF EDITOR**

Prof. V. ARIVUMANI, M.E Prof. M. BHAVANI, M.E

#### **ASSOCIATE EDITOR**

Mr. K. MOHAN, IV Year EEE Mr. J. R. RANDAL, II Year EEE Mr. P. VIZHIVANDAN, II Year EEE

## ACHIEVEMENTS

### 2<sup>nd</sup> year

RANDAL J R VIZHIVANDAN P MURALI PRASATH P SREE AJITH KUMAR S L PALAVESAM VIGNESH S

#### JENITHA J ANUSHREYA NAG

3<sup>rd</sup> year

MANJU M

SANGEETHA S SUBHA M 3<sup>rd</sup> PRIZE

QCE FORUM '15 IN RAJALAKSHMI ENGINEERING COLLEGE ,CHENNAI.

2<sup>nd</sup> PRIZE

BIONICS 2K15 IN ADHIYAMAAN COLLEGE OF ENGINEERING ,HOSUR

1st PRIZE

EGLINT 2K15 IN BHARATHIDASAN ENGINEERING COLLEGE,VELLORE

**3<sup>rd</sup> PRIZE** 

PAVAI ENGINEERING COLLEGE



## WORLD'S FIRST MANNED ELECTRIC HELICOPTER

**Pascal Chretien**, an electrical and aerospace engineer managed to develop the world's first manned helicopter powered entirely by electricity.On August 12th, the engineer carried out the fist test flight that lasted 2 minutes and 10 seconds.

The most interesting, however, is the fact that the helicopter was designed and built by Chretien alone. In order to create his **DIY** electric helicopter, the designer required **12 months**.

It is worth mentioning that so far electric vehicles did not make it onto the market due to the fact that the flight dynamics of such a machine requires a lot of energy, which traditional batteries cannot provide. While electric planes need a lot of energy in the take of phase, helicopters require strong energy delivery during the take off, flying and landing phases. Thus, it was a great challenge for Pascal Chretien when **Solution F**, a firm based in France, asked him to create the first manned electric helicopter.

The main things that Pascal had in mind were **ultra-light design and powerful batteries**. He came up with a number of innovations that brought him closer to accomplishing the mission. The frame of his helicopter was made from 7020 aluminum tubing. The French company wanted a helicopter that could stay in the air from about 10 minutes.

Chretien used rechargeable lithium ion polymer pouch cells that boast an energy density of 160 watt-hours per kg. In the end the engineer delivered a manned electric helicopter can performed a test flight

### TEQIP II SPONSORED STUDENTS TRAINING PROGRAMME



TEQIP II SPONSORED EMBEDDED SYSTEMS PROGRAMME WAS CONDUCTED FOR THE 3<sup>rd</sup> YEAR STUDENTS WHICH WAS VERY USEFUL IN TERMS OF MIINI PROJECTS.

GATE COACHING FOR THE STUDENTS OF FINAL YEAR WAS CONDUCTED, IT IS VERY USEFUL FOR SCORE IN GATE EXAM







THE DESIGN AND MEODELLING OF ELECTRICAL AND ELECTRONICS CIRCUITS USING ORCAD AND MATLAB WAS CONDUCTED PROGRAM FOR FINAL YEARS



### HEAD OF DEPARTMENT

## Prof. K. SUBATHRA, M.E., (9442566101)

#### ASSISTANT PROFESSORS

Prof. R. SUDHA, M.E., (9486135780) Prof. K. MOHAN, M.E., (9443308497) Prof. A. THANGARAJ, M.E., (9489940850) Prof. M. BHAVANI, M.E., (9840263676) Dr. I. THANGARAJU, M.E., Ph.D., (9894752362) Prof. V. ARIVUMANI, M.E., (9003188200)

#### **GUEST LECTURERS**

 THIRU. A. GURUVENDRA KUMAR, M.E., (8056805422)

 THIRU. T. BALASUBRAMANIAN, M.E., (9600333114)

 THIRU. T. VIKRAMAN, M.E., (9487235539)

 THIRU. R. NAVEEN KUMAR, B.E., (8056485923)

NON TEACHING STAFF(TECHNIAL)

THIRU. M. SOUNDARARAJAN, (9444220709) THIRU. I. NAVEEN PRAKASH, (9043122937)

## WOMEN'S DAY CELEBRATION



CULTURAL EVENTS WAS CONDUCTED FOR THE GIRLS IN ALL DEPARTMENTS OF ALL YEAR IN A GRAND MANNER.OUR TRADITIONAL DANCE BHARATHANATIYAM RECEIVED HUGE APPLAUSE.

PRIZES WERE DISTRIBUTED BY THE CHIEF GUEST TO THE WNNERS OF VARIOUS COMPETIONS CONDUCTED BY THE ENJUREZ '15





THE MOTIVATIONAL SPEECH WAS GIVEN BY OUR PRINCIPAL & CHIF GUEST, WHICH WAS AN EYE CATCHING MOMENT IN THE CELEBRATION.THE DAY WAS CELEBRATED IN A GRAND MANNER TO GIVE RESPECT TO THE WOMENS.





# There is no EnginEEring without EEE



