

**IETE**

**REPORT**

**2013-2014**

## **BASIC ROBOTICS WORKSHOP**

- Date : 22 June 2013
- Time : 9.30 AM to 1.30 PM
- Venue : Seminar Hall & IC Lab, Dept. of ECE
- Faculty : Dr.K.Gopakumar , Prof. AnuAssis , Prof.PreethaBasu
- Aim : Introduction to Application level aspects of Technological Study

A workshop was conducted on 22nd June Saturday under the banner of IETE student's forum, TKMCE and ECE Association to introduce the younger engineers the most interesting and application level aspects of technological study. The program was also intended to motivate the next generation electronics and communication engineers to bring out their talents in their respective fields of interest of study.

The venue was fixed at the seminar hall and IC lab, EC department. The class began at 9.30a.m. Around fifty second year students attended the program. The program started with a welcome address by Mohammed Lazim, one of the chief organizers of the 'Decibelz'. Sanjay SB gave a brief introduction to the students on the program schedule and stressed the importance and the benefits of such classes. The classes comprised of two sessions including a basic theory session and a lab visit. The theory sessions were handled by the S7 students of the IETE forum.

Initially, Mr. Cline R.S gave a brief introduction towards the Electronics study. He started from the basics, familiarizing the students the structure, functions and uses of electronics devices like vacuum tube, diode, transistors, switches, gates etc. After that Mr. Sanjay S.B talked more about the circuits, especially in the digital electronics field. He gave an in depth description about relays, their practical application etc. An introduction to DTMF was given by Ms. Susmitha. The frequency pulse generation and transmission were a new concept for the students. That followed a talk on robotics handled by Mr. Akhil V.P. He gave a clear cut idea to the students on the concept of microcontrollers, their working, different components, sensors and a brief idea on the making of a line tracer robot.

After the theory session the students were asked to attend the lab visit. There they were showed the principles of communication and working of a line sensing robot and a DTMF land rover that the senior students assembled. The students were then divided into groups of five and a detailed circuit analysis was given on the line sensor. By the end of the day all students were bound to develop a keen interest on the subjects.

The program was wound up at 1.30p.m. It was more of an interaction than a tutorial. Altogether Decibelz despite being a program arranged in a very little time was a grand success with whole hearted support from the Department, with special reference to IETE staff coordinator Dr. K.Gopakumar , faculty members Asst.Prof.AnuAssis, Asst.Prof.PreethaBasu and the organizers of the workshop.



## **ANNUAL GENERAL BODY MEETING 13-14**

The Annual General Body meeting 2013-2014 of the IETE student's forum was conducted on 1<sup>st</sup> July 2013 at TKMCE Auditorium. After the invocation, the meeting commenced with a welcome address given by Mr. Mohammed Lazim P P, Chairman.

Prof. S. Parameshwaran, Principal of TKMCE delivered presidential address. Dr. K. Gopakumar, Staff Coordinator of ISF, gave brief note on proposed programs and activities. Sanjay S, Hon. Secretary, presented annual report and budget. Function ended with vote of thanks by Ms. SafeedaShireen.

The office bearers of IETE student's forum 2013-2014 are as follows:

- Dr. K. Gopakumar                      -Staff Coordinator
- Mohammed Lazim P P                -Chairman
- Sanjay S, S7                              -Secretary
- Sajin M K , S5                          -Treasurer
- SafeedaShireen, S7                    -Member
- BenvinBaiju, S5                         -Member
- Pranav Mohan P, S3                    -Member

## **SOLDERING WORKSHOP**

- Date : 23 & 24 July 2013
- Time : 4.15 PM to 5.30 PM
- Venue : Product Design Lab & Room No 235, Dept. of ECE
- Faculty : Prof Sajeena & Prof Preetha Basu

A Soldering Workshop was organized for third semester Electronics & Communication Engineering students as a part of 'dECiBELz' in association with Electronics & Communication Engineering Association and IETE Students Forum. Workshop was conducted on 23rd and 24th July 2013 from 4.15 PM to 5.30 PM at Dept. of ECE. Workshop was intended for familiarizing the students on the basic soldering theory and having a practical session on it. A basic introduction to soldering was given by Sanjay SB on first day.

### **First day:**

- Introduction to soldering
- Familiarizing components and equipment
- Practical session: soldering components on a dot board

### **Second day:**

- Practical session: Assembling an astable multivibrator using timer IC NE555 on a dot board and observing the output

About sixty T3 students attended the workshop. Practical sessions were handled by the seventh semester students of the department.

## **ATMEGA WORKSHOP**

- Date : 27<sup>th</sup> July 2013
- Time : 9.30 AM to 1.30 PM
- Venue : Department of ECE
- Faculty : Prof AbidHussain

ATMEGA Workshop was a hands-on Embedded Workshop based on ATmega16, AVR series of Microcontrollers from Atmel Corporations. Workshop was organized for fifth semester Electronics & Communication Engineering students as a part of 'dECIBELz' in association with Electronics & Communication Engineering Association and IETE Students Forum. Class was handled by Akhil VP of T7 and 45 T5 students attended the class. Programming Sessions were helped by Gorbin Cherian, Mohammed Lazim P P, Alfred George, Neeraj S, Jubin C Benny and Sanjay SB of T7.

### **Tutorials included:**

- ATmega IDE : AVR Studio & Atmel Studio
- AVR Basic Architecture
- Basic Registers
- PORT operation using io.h
- Pattern making using LEDs
- Using Extreme Burner AVR
- Burning using USBasp programmer
- Analog to Digital Conversion
- Introduction to Line Tracer Programming

### **Kit included:**

- ATmega 16 Microcontroller
- Voltage Regulator 7805
- 9v battery
- 10 k Pot
- Resistors and LEDs
- SPDT Switches

Winners of programming contest organized as part of workshop:

- Group 2 : Benvin, Nandu, Shehna, Lakshmipriya, Aishwarya

## **MOBRACE**

- Date : 28<sup>th</sup> August 2013
- Time : 9.30 AM to 1.30 PM
- Venue : Basket Ball Court

A Mobrace was conducted in the Basket Ball Court in association with IETE of TKMCE on 28<sup>th</sup> August 2013. The programme was coordinated by Sanjay S, executive member of IETE with the help of Sajin M K and Benvin Baiju. The track and other requirements for the event were arranged by first year students and the competition started by 9.30 am. 9 teams participated in the competition. All teams completed the track in different times. First, second and third prizes were announced by analyzing the race of each team. The event wound up at 1.30pm by taking group photo. First and Second year students were volunteered the programme

**Winners:**

First Prize : Aisha Nazia N M –T3  
 Second Prize : Nitto Tomy – T3  
 Third Prize : Jerin Jose –T3

**LAB ORIENTATION PROGRAMME**

- Date : 27-29<sup>th</sup> January 2014

- Time : 4.30 PM to 5.45 PM
- Venue : Communication lab, Electronics Circuits Lab, Room no 233
- Faculty : Biju P
- Aim : Familiarization of Basic Circuits, Components and CRO

About 60 students from second semester attended the programme.

**Day 1:** Class by Jerin Jose of sixth Semester about basic electronics & familiarize discrete components.

**Day 2 and 3:** Practical Sessions

Circuits included Halfwave rectifier, Full wave rectifier, RC phase shift Oscillator, Dancing Light along with AstableMultivibrator using 555.

A competition to find effective resistance value from the circuit provided was also conducted.

**Winners:**

1. Namshad , Prince ,Rahul Rahumath, Rosmin
2. Jomy, Hima, Krishna ,Megha