

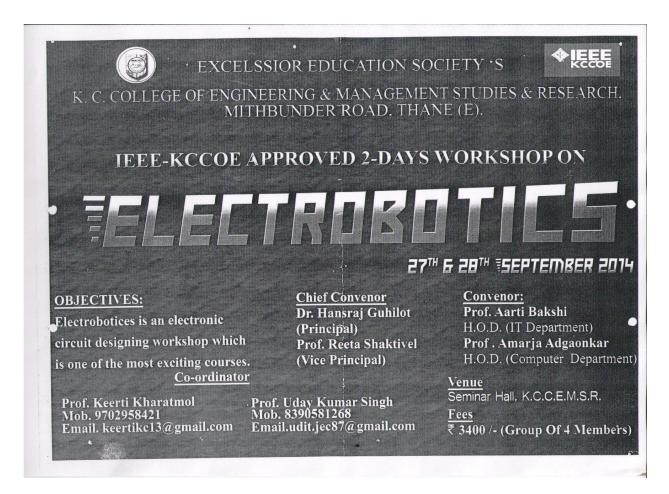
## **Excelssior Education Society's**

# K.C. College of Engineering and Management Studies and Research Mith Bunder Road, Near Hume Pipe, Kopri, Thane (E)-400603

Name of the event: Workshop on Electrobotics

Name of Speaker: Mr. Jekin Dedhia

Date: 27/09/2014-28/09/2014



## REPORT OF ELECTROBOTICS WORKSHOP

#### **OBJECTIVE:**

Electrobotics is an electronic circuit designing workshop which is one of the most exciting courses we offer for young technical students to think, innovate and to implement those ideas in the real world. This workshop will give a detailed exposure to various electronic components that will help you understand the concepts and ultimately think out of the box.

#### CONTENTS:

- · Basic Concept
  - Basic electronics components and their properties (i.e., Current, Voltage and power, Resistors & potentiometers, Capacitors, LED, Transistors etc.)
- · Assembling of Kit
- · Theory session on
  - 1. Power Supply Circuit
  - 2. Breadboard
  - 3. Transistors
  - 4. Different types of motors and their specifications
  - 5. Different Sensors
  - 6. Op-Amp
  - 7. Introduction of IC555
  - 8. IC555 as mono stable M.V.
  - 9. IC555 as Astable M.V.
- Activity Session
  - 1. Op-Amp as Light Sensors
  - 2. Light Activated Robot
  - 3. Line Following Bot
  - 4. Light Chasing Bot
  - 5. Edge Detector Robot
  - 6. Mounting IC555 As Mono-Stable M.V.
  - 7. Touch Activated Robot
  - 8. Obstacle Avoider Robot
  - 9. Wall Following Robot
  - 10. PWM Based Speed Controller
- Small Competition of Robotics