

Newsletter

Jan-June 2020

DEPARTMENT OF
ELECTRICAL & ELECTRONICS ENGINERING

DEPARTMENTAL ACTIVITIES

Training On Arduino And Embedded Systems

SISTec Department of Electrical & Electronics Engineering conducted the training on "Arduino and Embedded Systems" from 6th Jan to 8th Jan 2020.

Trainer Mr. Rajeev Ranjan has taken the session and also conducted a hands-on training workshop for the students.

The Following topics were accomplished during the session-

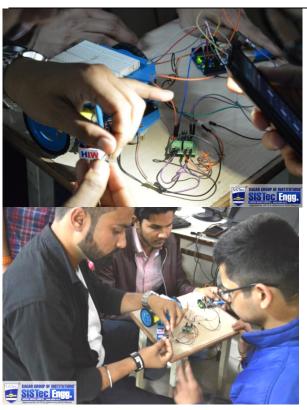
- Introduction to Embedded systems.
- Introduction to programming in embedded
- Introduction to controller
- Introduction to Sensor, Motor, and other peripherals.
- Introduction to Bluetooth. Wi-Fi and other communication
- Introduction to IOT
- Introduction to automation technology, embedded systems and devices.

Following projects were made by the students during the 3-day workshop-

- Iot controlled home automation
- Arduino controlled traffic light
- Bluetooth robot
- Face detection system
- Temperature sensor IOT based













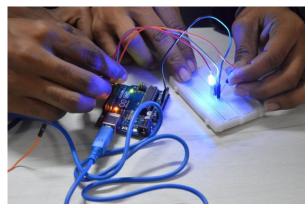












DAY 1: First year students training

Training update ~ glimpse of the session

The training session for first year electrical engineering students was initiated, which comprised of two sessions. The morning session was based on Basic Electrical and Electronic Components. Students learned about various electrical & electronic components like Resistor, Inductor, Capacitor, Diodes, Transistor, IC's. These components are used extensively in all circuits. Proceeding with the training session students learnt the soldering process using soldering iron the soldered these components to make a basic circuit on a PCB. And in the afternoon session students made simple electrical circuits such as series-parallel combination of resistors, series-LED circuit, Capacitor charging and discharging circuit. This training was the introductory session for electrical students to build their basic knowledge about the subject. And the hands on session was focused to boost the confidence of the students by enhancing the practical applications.

Day 2: First year students training session

The training session was conducted by Prof. Sitaram Raikwar, in this training session the second semester students learnt about the process to convert

220 volts AC to 12 volts DC regulated supply. In this session students learned about the process to convert AC power to DC power. Along with this they also learned the difference between unregulated and regulated power supply, voltage regulators & rectifier circuit.

And in the afternoon session students were given a hands on training and later on they themselves performed a practical to convert 220 volts AC power supply to 12 volts regulated power supply.

After this they also learned to design Rectifier circuit and regulated DC supply on a PCB. This session proved to be very insightful session as to how does the electric circuits actually works. Design of electrical circuits and power supply is very crucial for electrical engineering students to understand the industrial electrical works.



Day: 1 Training Update

Training session for 4th semester electrical engineering students was conducted successfully by Prof. Sitaram Raikwar.

The theme of the session was 'Electrical Transformer-working, construction, assembling & tapping". A comprehensive audio visual session was presented to make the students understand about the Transformer.

Moreover, A practical hands on session was conducted in which students themselves constructed the core of a 120VA transformer by using core stampings, not only this, the students also made a modification in the transformer by providing tappings in the transformer which allows the transformer to deliver 3,6,9,12 and 24 volts individually.

This session gave the students a basic understanding of the transformer and its constructional aspects, which makes the students industry ready, as the transformer is a very versatile machine which is used almost at every place where the electricity is used.

Day 2: Training session update

Hands on training sessions were conducted for 4th semester electrical engineering students by Prof. Sitaram Raikwar.

The theme of this session was "Audio signal Amplifier". The training was conducted in two parts, in the morning session students learned about various methods used for Audio signal amplification. And in the afternoon session students designed the amplifier circuit using CD4440 IC.

CD4440 IC is a two channel audio amplifier with inbuilt in dual channels. It is used for stereo and bridge amplifier modes.

Amplifiers find their application at various places such as public address systems, theatrical and concert sound reinforcement systems, and domestic systems such as a stereo or home-theater system.

In this training Students learnt audio amplification technique and they synthesized audio amplifier circuit in practical hands on session.

Such trainings are essential to make the student industry ready and also to make them prepared to work in professional environments.

Day 3: Training on Audio signal Amplifier

Fourth semester electrical engineering students completed the hands on practical session successfully. Students synthesized Audio signal amplifier circuit.





STUDENT ACTIVITIES

Electrical Engineering students from 6th semester participated in Wall Painting competition held at RGPV, Bhopal organized by Green Energy Club on theme of Energy Conservation. (31 Jan 2020)









Training on Electro mechanical operations of cranes at HSEPL crane division Bhopal (30 Jan 2020)

The student group from 6th semester Electrical Engineering got trained about Electro mechanical operations of cranes at HSEPL crane division Bhopal. During the Training Students learnt about Wire rope vs smart single cyclinder systems

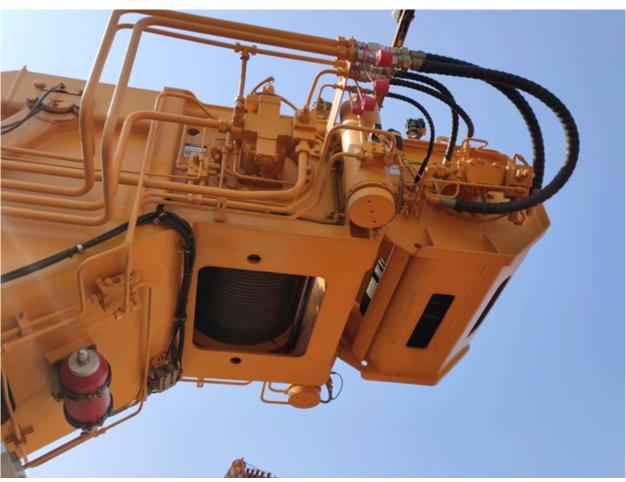
- Excel piston pump
- Pneumatic systems
- Hydraulic systems
- PLC electrical controls
- Crawler Crane

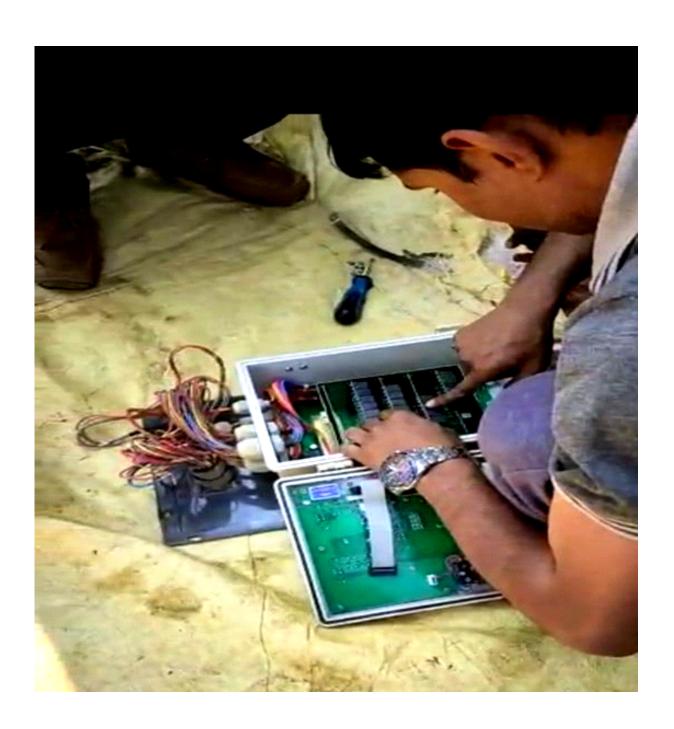
Crawler cranes are commonly used cranes but they are used for construction purposes like big buildings because of its surface manageable tracks instead of rubber tires.

Crawler cranes found as comprehensive construction machines that constructs freely with its easy mobilization facility of objects far away from sites.

Crawler cranes are only machines that can hold more than 35000 tons of weight at one time but the compulsion is that it can't mobile steadily with weights! (30 Jan 2020)







PLACEMENTS

Congratulations to the students for getting placed as System Engineer in Infosys



Congratulations to the students for getting placed as VLSI Engineer (30 Mar 2020)



Congratulations to the students for getting placed in FLDEC Systems as VISI Engineer (06 Feb 2020)



Congratulations to all for getting placed in TCS as NINJA DEVELOPER at 3.5 LPA (22 Jan 2020)

