

## NARAYANA ENGINEERING COLLEGE :: GUDUR

(Approved by AICTE, Affiliated to JNTUA & An ISO 9001-2008 Certified Organization)

#### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

# Sept- 2019 Events Summary

S. N O	DATE	NAME OF THE EVENT	Involved by	LOCATION	<b>Resource Person</b>
1.	16/09/2019	" Singing Competition "	II,III and IV Year Students	NEC,Gudur	Smt.K.Jayanthi MPD,Gudur
2.	21/09/2019	Industrial visit at "2.5MW Wind Farm Project" at Narsimhakonda	II-EEE	Narsimhakonda	Sri. V. Ramalingaiah District Manager, NREDCAP LTD Nellore
3.	21/09/2019	PGCIL (765/400KV Nellore Pooling Station)	III-EEE	Jatlakonduru	Shri. K Arunachalam Chief Manager, PGCIL,
4.	16/09/2019 to 20/09/2019	Certificate course on "PCB Designing & Fabrication "	II,III and IV Year Students	NEC,Gudur	Mr.D.Kalyan Mr.K.Shivendra Take off ,Tirupati
5.	25.09.2019	Guest Lecture on" Electronic Devices & Circuits "	II-EEE	NEC,Gudur	Mr.S.MM TRINATH Expert Faculty from ACE Engineering Academy, Hyderabad

#### 1. "Singing Competition"

16.09.2019

Department of EEE conducted **singing competition** on 16.09.2019 on the occasion of **M S Subbulakshmi Jayanthi** under **swara club** in EEE Seminar hall for encouraging the students vocal and instrumental abilities In this occasion Dr.V.Ravi Prasad Prof.In-charge of Hobby clubs addressed the students about swara club. 16 students were participated from various departments and the following students were selected as winners. Principal Dr.C.H.V.S.Parameswar Rao and Vice Principal Dr.V.Raviprasad distributed the Prizes for the winners.

2. Industrial visit at 2.5MW Wind Farm Project Narsimhakonda

21.09.2019

#### 1) Brief outline of key issues and challenges addressed in the event

Our main purpose for this visit is to be familiar with industrial environment and to get practical knowledge of electrical power generation through Renewable source Energy.

Students will get the idea of electrical power generation, Transmission and distribution. Students will also get familiar with Wind Mill, Wind Turbine and its parts

#### 2) Key messages, outcomes, recommendations

**Key Points:-**

#### How Electricity is generated:

The wind direction rotates the wind turbine to face into the wind. The energy in the wind (called kinetic energy) turns the turbine blades around the rotor (creating mechanical energy). The rotor connects to the main shaft, which turns inside the generator housing. Here, a magnetic rotor spins inside loops of cooper wire. The electricity generated then travels down large cables from the nacelle, through the tower, and into an underground cable. At wind farms, cables from different turbines take the electricity generated to a substation. Here, a step-up transformer again

Increases the electrical output. A transmission line connects the electricity output at the substation to the electrical grid serving communities throughout the region

- > Types of Generator Used: (i) Single winding: It is run on 1000 rpm
- ii) Double Winding: It is run on 750 rpm
  - > Wind Mill Capacity: Capacity of wind mill 2.5MW

Height of the wind mill is 30 meter

3) Conclusions by the Chair of the event

From this visit, we got the information and practical knowledge about Power Generation through wind mill and transmission and distribution of power. Student got the knowledge about wind mill, wind turbine, generator. They got the idea how electricity is generated through wind mill and types of generator and their connection and from the control panel how to take reading and how to manually stop wind mill. About 35 students of Seond year I Semester Electrical &Electronics Engineering Class of NarayanaEngineering College Gudur

We are especially thankful to respected SRI V. RAMALINGAIAH District Manager, NREDCAP LTD Nellore division because they granted us permission

3. Industrial visit at PGCIL (765/400KV Nellore Pooling Station, Jatlakonduru".

#### 21.09.2019

III B.Tech students got permission to visit power grid at manubolu in Nellore district, under the guidance of our department. The power grid Power Grid Corporation of India, JATALAKONDURU has the voltage of 400/210/132kv which has input feeders from krishnapatnam port and one is from Vijayawada Which is stepped and supplied to various areas in Nellore such as Gudur and manubolu steel Plant. After reaching the power grid the professional people in the grid explained the components and their working. Some of the components we had seen in the power grid are current transformer, sf6, circuit breakers, inductive reactors in different ranges, lighting arrestors, control panels etc.

4. Certificate course on "PCB DESIGNING & FABRICATION "

16<sup>th</sup> to 21<sup>st</sup> SEPTEMBER 2019

The Certificate Course on PCB Designing&Fabrication was started on 16<sup>th</sup> September, 2019 with the introduction of the team (Mr.D.Kalyan&Mr.K.Shivendra Mohan Singh)from Takeoff Group ,Tirupati. This program was conducted by coordinator Mr.N.Chenchaiah with the guidance of Dr.J A Baskar, Head of the Department of EEE. The course ran Six days effectively from 16-09-2019 and concluded on 21-09-2019 with total duration of 30+hours. All the students of Second Year were workhard, arise many questions, while conducting the program. During conducting the Program majatity students are designed the circuit and execute the program. The program was conducted in EEE Seminar Hall.

**Mr.S.MM TRINATH** emphasized on overview of **EDC** design flow including from the design specifications to fabrication of chip and bought it into market. He discussed about design specifications like block diagram of main and individual modules, no.of. inputs and outputs of all module, speed, power dissipation, package types and cost. The lecture also discussed about simulation process like logical verification of modules, sub modules in terms of truth tables and waveforms to check functionality.

The lecture has also provided information on system partitioning, floor planning such as estimation of required chip area that will be used for standard cells and determine shapes of sizes of each sub module to get high performance. The lecture also focused on placement of each module, routing and testing techniques such as design & electrical rule check, short circuit & antenna test and troubleshooting of various faults on IC's. Around 48 students of second year B.Tech of EEE has attended and interacted with the guest. A good feedback has been given by the students

### FACULTY

HOD, EEE