



**NARAYANA**  
ENGINEERING COLLEGE :: NELLORE  
(APPROVED BY AICTE, NEW DELHI & PERMANENTLY AFFILIATED TO JNTU, ANANTHAPURAMU)

# Newsletter N-SPARK

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

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Volume - 2

## Editorial Board Members

**Dr.G.Venkateswarlu**, (Chief Advisor)  
**Ms.L.Naga Lakshmi**, (Chief Editor)

## Student Editors

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**BVSM.Pawan Kalyan**, II EEE

### COLLEGE

#### Vision of the Institute

To be one of the nation's premier Institutions for Technical and Management Education and a key contributor for Technological and Socio-economic Development of the Nation.

#### Mission of the Institute

To produce technically competent Engineers and Managers by maintaining high academic standards, world class infrastructure and core instructions.

To enhance innovative skills and multi disciplinary approach of students through well experienced faculty and industry interactions.

To inculcate global perspective and attitude of students to face real world challenges by developing leadership qualities, lifelong learning abilities and ethical values.

### Department

#### Vision of the Department

To impart knowledge in the field of Electrical and Electronics Engineering to meet the technical challenges of industry and society with strong innovative skills, leadership qualities and ethics.

#### Mission of the Department

To provide standard training and effective teaching learning process to the students by using the state-of-the-art laboratories, core instruction and efficient faculty.

To enhance competent, innovative and technical skills amongst the students through training programs by industry and external participation.

To inculcate leadership qualities, ethical values and lifelong learning skills in learners to serve the society and nation for overall development through value based education.

### Program Educational Objectives (PEOs)

Programme Educational Objectives (PEOs) of B.Tech (Electrical and Electronics Engineering) program are: Within few years of graduation, the graduates will

**PEO-1:** To solve composite problems using mathematics, basic sciences and engineering principles in the domains of testing, design and manufacturing.

**PEO-2:** To achieve higher positions in their profession by demonstrating leadership qualities, research and innovative abilities.

**PEO-3:** To contribute in the field of Electrical and Electronics Engineering to finding solutions for societal problems through their lifelong learning skills and ethical values.

### Program Outcomes (POs)

**PO-1 :** Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**PO-2 :** Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO-3 :** Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.



**PO-4** : Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**PO-5** : Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**PO-6** : The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

**PO-7** : Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PO-8** : Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**PO-9** : Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**PO-10** : Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**PO-11** : Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**PO-12** : Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

### PSOs of the Department

On completion of the B.Tech. (Electrical and Electronics Engineering) degree, the graduates will be able to

**PSO-1**: Provide alternate solutions to address the problems with specific requirements in the field of Electrical and Electronics Engineering.

**PSO-2**: be ready to work professionally in relevant industries like power systems, control systems and software industries.

### National Level Technical Symposium in Electrical Engineering (NTSEE-18)

On 13<sup>th</sup> October 2018 Narayana engineering college, Nellore organized a "National level technical symposium in electrical engineering" (NTSEE-18). The technical events like paper presentation, poster presentation, technical quiz, working model were held in a lively manner. The college had the privilege to invite the eminent personalities like holy ram chinni , meenakshi power plant president for Inaugural function. Both chief guests inspired the students with their speeches. The event was an appropriate platform for students to come up with their own innovative ideas in their respective streams. Some students are actively participated as volunteers and some proved their skills in various events. In this event Over 700 people attended the event and around 150 students from various colleges also participated.





## Teachers Day

Narayana Engineering College, Nellore organized "Teacher's Day" on 05/9/2018. In the morning 10.00 a.m. of September 5th was organized. The event started with HOD Sir Speech, In India, Teachers' Day is celebrated on September 5 in honor of Dr. Sarvepalli Radhakrishnan. Before becoming the first vice-president and the second president of India, he was, more importantly, a respected scholar and teacher of philosophy. Few staff members deliver their speech about importance of teacher in the society.

Finally it is tradition that we offer a garland to a respectable personality. So all the Teaching and non teaching staff members respected great personality Dr Sarvepalli Radhakrishnan with flower.



## Faculty Development Program

The department of EEE has conducted one week Faculty Development Program on "Advanced power electronics application using SPICE programming" in Association with LAB TECH INNOVATIONS from 17<sup>th</sup> to 22<sup>nd</sup> Dec 2018 at Edison Auditorium in Faraday Block, NEC, Nellore. The Resource person of the program Mr. M. Dhanraj, Tech lab, Hyderabad was started the program with 50 faculty members in this 31 from our college and 19 from other various colleges. The session started with introduction of SPICE fundamentals used in power electronics applications. And in other sessions they deal with the introduction of simulation tools for power electronics applications and continued with hands on session to all faculty members.

## Guest Lecture on Career Awareness Program

Guest lecture on "career awareness program" was organized at Narayana Engineering College, Nellore, for the students of III B.Tech EEE On 20/7/2018. The session was conducted by G. Srinivasulu Reddy, principal NECN.



## Guest Lecture on Electronic Devices and Circuits

Guest lecture on "Electronic Devices and circuits" was organized at Narayana engineering college, Nellore, for all EEE students on 28<sup>th</sup> & 29<sup>th</sup> July 2018. The session was conducted by Mr. Ramanaiah Assoc. prof in Govt. polytechnic college.



## Guest Lecture on Digital Electronics

Guest lecture on "Digital electronics" was organized at Narayana engineering college, Nellore, for EEE Students on 4/8/2018 & 5/8/2018. The session was conducted by K. Gangadhar reddy, gate academy, Hyderabad. In this session they discussed about important topics in digital electronics that are useful to write GATE and other competitive exams.



## Career awareness on Electrical Engineering Jobs

A "Career awareness on Electrical Engineering Jobs" was organized at Narayana engineering college, Nellore, for the students of III B.Tech EEE On 8<sup>th</sup> August 2018. The session was conducted by our college Alumni Mr. M. Vishnu & Mr. A. Suresh visited to campus and he shared his knowledge with students.



In this session he enlightened the students how to face an interview and the strategies to be adopted. He mainly focused on opportunities available in the Government sector especially for those pursuing Electrical engineering.



### Guest Lecture on Designing of PLC and SCADA

Guest lecture on “Designing of PLC and SCADA” was organized at Narayana engineering college, Nellore, for III EEE students on 10/8/2018. The session was conducted by Mr. V.Madhukar, Assoc. Director of prolific system and technologies Pvt.ltd. The session is about PLC and SCADA and their importance in Electrical Engineering.



### Guest Lecture on Awareness Program on Higher Education GRE/TOEFL

Guest lecture on “Awareness program on higher education GRE/TOEFL” was organized at Narayana Engineering College, for the students of III B.Tech EEE On 27/8/2018. The session was conducted by G.Srinivasulu Reddy, principal NECN. prof. M. Deva santhanam pillai, Director, st. Anne’s Academy Sion study Abroad consultants.



### Marketing Trends in Electrical Appliances

Guest lecture on “Marketing Trends in electrical appliances” was organized at Narayana engineering college, Nellore, for IV EEE students on 12/9/2018. The session was conducted by our college Alumni Mr.Sd. Adeed, Marketing engineer, Hyderabad.



### Guest Lecture on Electrical Simulation and Control of Boilers

Guest lecture on “Electrical simulation and control of boilers” was organized at Narayana Engineering College, Nellore, for the students of II B.Tech EEE On 12/9/2018. The session was conducted by Alumni Mr.B. Vamsi kumar sarma, simulation engineer, SIM INFO-SYSTEMS, Chennai



### Guest Lecture on Career guidelines And importance of electrical engineering

Guest lecture on “ Career guidelines And importance of electrical engineering” was organized at Narayana engineering college, Nellore, for the students of IV B. Tech EEE On 26<sup>th</sup> sep 2018. The session was conducted by Alumni Mr. Rama subba reddy, Asst. Engineer in RRB, Gunthakal





## Guest Lecture on Electrical design & Installation

Guest lecture on "Electrical design & Installation" was organized at Narayana Engineering College, Nellore, for the students of III B.Tech EEE On 8/10/2018. The session was conducted by our college Alumni Sk. Shakeer Ahammad & Syed Hidayathulla, Project Engineer, AMI, Nandyal.



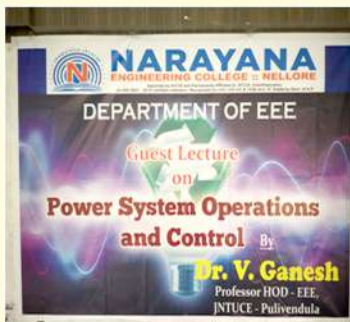
## Guest Lecture on Importance Of Electrical Engineering

Guest lecture on "Importance Of Electrical Engineering" was organized at Narayana Engineering College, Nellore, for the students of III B.Tech EEE On 9/10/2018. The session was conducted by our college Alumni K.Sai Gangadhar & N.Chaitnaya Kumar Reddy



## Guest Lecture on Power System Operation and Control

Guest lecture on "power system operation and control" was organized at Narayana Engineering College, Nellore, for the students of III B.Tech EEE On 24/10/2018. The session was conducted by Dr.V.Ganesh, professor, HOD, JNTUCE, Pulivendula



## Safety Precautions for Earthing

Narayana engineering college organized NSS event on "safety precautions for earthing" near 33/11kv substation harinadhparam, Nellore by our students

The main points are:

- Follow the manufacturer's operating and safety instructions. Prefer single phase/ two phase, 3 wire system in house wiring including grounding wire running along the wiring.
- Distribute the entire calculated load on the MDBs and SDBs properly.
- Use standard ISI approved wires, cables for wiring.
- Never extinguish electric fire by water.



## International Girl Child Day

"International girl child day" was conducted in Narayana Engineering College Nellore at Edison auditorium on 11-10-2018 by jakka seshamma, advocate. The International Day of the Girl Child is a reminder that to inspire the girls from girl's stories and ideas. The main focus is to understand the issues that they face in their life.





## Energy Conservation Rally

On 14/12/2018 Narayana Engineering College, Nellore EEE department NSS association organized a Rally on "Energy conservation Rally" from Vidyuth Bhavan to collector office, Nellore. In this rally total 60 students and 10 faculty members are participated. The motto of this rally is to "Save Energy. Save Money. Save the Planet" and concluded with "ENERGY MISUSED CANNOT BE EXCUSED".



## Elocution

To improve student's communication skills narayana engineering college, sakala student association has organized the "Elocution" for all EEE students (II, III, IV B.Tech STUDENTS) on 4-8-2018. Such event helps the students in following ways:

1. Participation adds interest for students
2. Speak confidently
3. Use positive body language



## Technical Quiz

Narayana engineering college, sakala student association has organized the event on Technical Quiz for all EEE students (II, III, IV B.Tech STUDENTS) on 18-8-2018. Such events benefit the students in following ways:

1. Participation adds interest for students
2. Listening. Being a good listener is one of the best ways to be a good communicator.

3. Nonverbal Communication. Your body language, eye contact, hand gestures, and tone all color the message you are trying to convey.

4. Clarity and Concision.

5. Friendliness.



## Group Discussion

To improve student's communication skills Narayana engineering college, sakala student association has organized the event on group discussion for all EEE students (II, III, IV B.Tech STUDENTS) on 1-9-2018. Such events benefit the students in following ways:

1. Participation adds interest for students
2. Initiate the discussion
3. Speak politely and pleasantly
4. Acquire and apply knowledge



## DEBATE

On 29/12/2018 Narayana Engineering College, Nellore EEE department student association organized a "DEBATE" at Edison Auditorium with 40 students. The Debate has conducted on "Cell phones and Smart phones, Are they safe for us?" at 01:30 p.m for II, III & IV year B.Tech students are actively participated in this event and made this event a grand success.

After listening to the points spoke by both teams finally concluded that, none of us today can afford to avoid mobile phones. But certainly we can ensure that mobile phones are our servants and not our masters. We can fix boundaries for the time we spend with mobile phones, boundaries that should not be stretched or crossed.



We can then live with dignity with the assurance that mobile phones serve our cause and that they will not dictate us to a life of bondage and slavery and unending boredom with so called entertainment.



### Health Awareness Program on Gynic Problems

On 24/11/2018 Narayana engineering college organized the women's forum event "Health awareness program on gynic problems" by women's forum coordinator.

The program was chaired by Dr.k.suvachala , Ramchandra reddy hospital & total 105 girl students, 3 faculty members are participated in Edison auditorium.



### One Week Value Added Course on MATLAB Applications in Electrical Engineering

A one week value added course on "MATLAB Applications in Electrical Engineering" was organized at Narayana Engineering college, Nellore from 4/8/2018 to 10/8/2018 for III & IV year EEE students

by Mr. V. Madhukar, Assoc.Director of prolific system and technologies Pvt.ltd. In this course they discussed about MATLAB in detail and also had hands on session. Such courses benefit the students.



### A four day work shop Circuit Simulation Using Multi-Sim

A four day work shop on "Circuit simulation using multi-sim" was organized at Narayana engineering college Nellore on 9/10/2018 for III & IV EEE students. In this session they discussed about simulation by using multi-sim software. Also had hands on session. Such workshop benefits the students to know latest technology in electrical engineering.



### Bridge course on Basics of Electrical circuits-II

Bridge course on "Basics of Electrical circuits-II" was organized at Narayana Engineering College, Nellore for the students of II B.Tech EEE On 13/7/2018.The session was conducted by Mr. B.Akib Khan, Assoc. Professor, NECN.





## Basics of Electro-Magnetics

Narayana engineering college organized a bridge course on “Basics of electro-magnetics” by G.Venkateswarlu, HOD EEE, and NECN. In this regard all the II B.Tech EEE Students have attended the program on 16/7/18. This session benefits the students to learn the basics of electrical machines.



## Basics of Electrical Machines-III

Bridge course on “Basics of Electrical machines-III” was organized at Narayana Engineering College, Nellore for the students of III B.Tech EEE. On 16/7/18. The session was conducted by Mrs. M.Suneetha.



## INDUSTRIAL VISIT (11 KV SUBSTATION)

On 29/9/18 EEE III B.Tech students got permission to visit 33/11 KV substation, near NEC, Nellore under the guidance of our department. The substation has the voltage of 33/11KV which is supplied to various areas in Nellore. We started from college at 10.00a.m. The A.E of substation explained the components and their working. Some of the components we had seen in the substation such as current transformer, SF6, circuit breakers, inductive reactors in different ranges, lighting arrestors, control panels etc. Such industrial visits organized by Narayana engineering college helps the students to enhance their practical knowledge on industrial sites.



## INDUSTRIAL VISIT (NIPPO FACTORY)

On 06/10/18 EEE II B.Tech students got permission to visit Nippo factory, under the guidance of our department. In the factory students observed the process of battery manufacturing .We started from the college at 7.00a.m in our college bus and we reached our destination at 10.45 a.m. After reaching the factory the professional people in the factory explained the components and their working. Also they showed the latest technology equipments and its fast working process.

Such industrial visits organized by Narayana engineering college helps the students to enhance their practical knowledge on industrial sites.



## INDUSTRIAL VISIT (400 KV AP TRANSCO Substation)

On 5/8/18 Narayana engineering college EEE IV B.Tech students got permission to visit power grid at manubolu in Nellore district, under the guidance of our department. The power grid has the voltage of 400/210/132KV which has input feeders from krishnapatnam port and one is from Vijayawada.

Finally with the help of this visit we came to know about different electrical equipments which are used in power grid for transmission and protection. Such industrial visits organized by Narayana engineering college helps the students to enhance their practical knowledge on industrial sites.

