



# NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS)

## ELECTRA



### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

www.nrtec.in

Volume : 08, Issue : 02

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(IV EEE)



**NARASARAOPETA  
ENGINEERING COLLEGE**  
(AUTONOMOUS)

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

#### VISION OF THE DEPARTMENT

To impart student centric education in the field of Electrical and Electronics Engineering to transform the individuals into competent engineers with a focus on research and ethics.

#### MISSION OF THE DEPARTMENT

- M1: To provide knowledge based technology and infrastructure to meet the needs of industry and society.  
M2: To assimilate innovation and research oriented culture to make successful professionals and entrepreneurs.  
M3: To encourage lifelong learning with ethics among the students so as to make them as responsible individuals.

#### PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- PEO 1** Apply the science and engineering knowledge to solve complex problems of electrical and electronics engineering.  
**PEO 2** Continue their education to become as researchers and entrepreneurs.  
**PEO 3** Work effectively with high ethical values, as individuals and as team members.  
**PEO 4** Adopt new methodologies as lifelong learners for their career growth.

#### PROGRAM SPECIFIC OUTCOMES (PSOs)

- PSO 1** Apply appropriate techniques and modern tools in the field of electrical and electronics engineering.  
**PSO 2** Demonstrate the sustainable development in non-conventional Energy sources.



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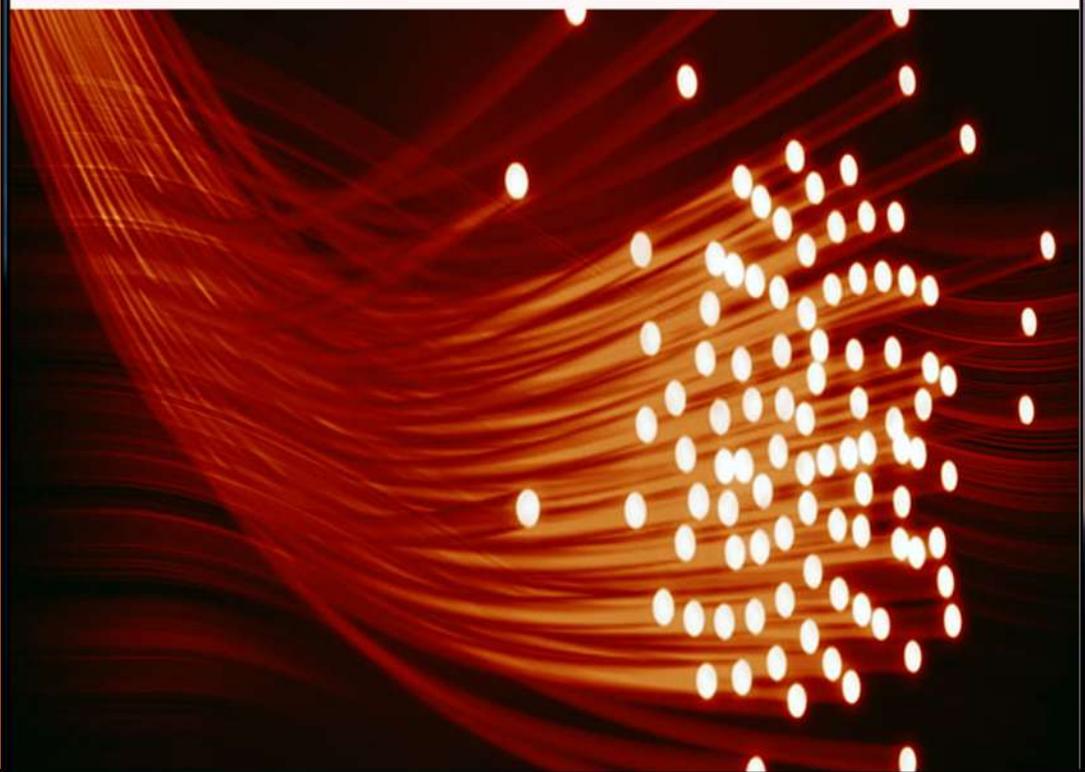
#### PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

- PO1: Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.  
**PO2: 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.  
**PO3: 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.  
**PO4: 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.  
**PO5: 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.  
**PO6: 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.  
**PO7: 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.  
**PO8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.  
**PO9: Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.  
**PO10: 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.  
**PO11: 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.  
**PO12: 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.

#### Inspirational Quotes

**KNOW WHAT SPARKS THE LIGHT IN YOU.THEN USE THAT  
LIGHT TO ILLUMINATE THE WORLD.**



## ELECTRA

SAVE energy-save earth  
JULY-2024 TO DECEMBER-2024

VOLUME- 8, ISSUE-2

### Editorial Board

#### Chief Editor

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#### Editor

M.Gowthami, Asst. Professor

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2. K. Janardhan Babu (IIEEE)
3. Shaik Ashraf Jaha (IIIEEE)
4. Shaik Kalam Sabir (IIIEEE)
5. Pallapu Gopichand (IVEEE)
6. Kotte Gayathri (IVEEE)

### Vision

- ❖ To impart student Centric Education in the field of Electrical & Electronics Engineering to transform the individuals into competent Engineers with a focus on research and ethics.

### Mission

- ❖ To provide knowledge-based technology and infrastructure to meet the needs of industry and Society.
- ❖ To assimilate innovation and research-oriented culture to make successful professionals and entrepreneurs.
- ❖ To encourage lifelong learning with ethics among the students so as to make them as responsible individuals.

### WIRELESS CHARGING

One area of technology that holds particular promise for expanding the electric vehicle market is wireless charging. Wireless charging has some current applications for personal devices like laptops, smartphones and earbuds, and it will likely eventually become standard for electric vehicles as well. An electric car owner will be able to park on a charging spot without the hassle of plugging in the car. Wireless charging docks will also be smaller, so they'll likely become easier and more cost-effective to build.



Wireless charging has some current applications for personal devices like laptops, smartphones and earbuds, and it will likely eventually **become standard for electric vehicles as well.**

### Electric Vehicles

Despite years of mass production, electric vehicles still remain a trend in electrical engineering that continues to rise in consumer popularity. Electric cars are becoming mainstream offerings. Though charging infrastructure still needs to be developed, many electric vehicle owners can find readily accessible charging stations in many locations. Consumers might even qualify for tax incentives or credits for purchasing an electric vehicle.

With electric vehicle manufacturer Tesla continuing to break records for production and market value, it's clear the future

**KNOWWHATSPARKSTHELIGHTINYOU.THENUSETHATLIGHTTOILLUMINATETHEWORLD.**

## Newsletter of Electrical and Electronics Engineering Department

# ELECTRA

SAVE energy-save earth  
JULY-2024 TO DECEMBER-2024

VOLUME- 8, ISSUE-2

of electronics is in cars. As consumers become more conscious of sustainability and emissions, the popularity of electric vehicles will only grow. Several major automotive companies are also deeply invested in electrification: Ford, General Motors, Honda, Toyota, and Stellantis are just a few of them.



### Faculty Focus

#### International Journals:

- ❖ **Dr.P. Lakshmanan** has presented a paper on “**Performance Investigation of 17 level Reduced Switch Count Multilevel Inverter**” by International Journal of Electrical and Computer Engineering Systems, Volume 15,Number 7,2024.

#### **FDPs Attended:**

- ❖ **Mrs. M.Gowthami** has successfully completed “**Inculcating Universal Human Values in Technical Education**” 5-day Online FDP authorized by All India Council for Technical Education (AICTE) from **9<sup>th</sup> September to 13<sup>th</sup> September 2024**.
- ❖ **Mr. P.D.V.S.Kishore** has successfully completed

“**Inculcating Universal Human Values in Technical Education**” 5-day Online FDP authorized by All India Council for Technical Education (AICTE) from **9<sup>th</sup> September to 13<sup>th</sup> September**

- ❖ **Mr. M. Chandra sekhar** has successfully completed “**Nano Innovations: Shaping The World Of Tomorrow**” 6-day Online FDP authorized by Department Of Humanities and basic Sciences,Sri Indu College Of Engineering and Technology,Sheriguda from from **9<sup>th</sup> September to 14<sup>th</sup> September 2024**

- ❖ **Mr. M. Chandra sekhar** has successfully completed “**AI for Engineering Applications**” 5-day Online FDP authorized by National Institute of Technical Teachers Training and Research Chandigarh from **4<sup>th</sup> November to 8<sup>th</sup> November 2024**

- ❖ **Dr. Sk. Md. Shareef** has successfully participated & completed “**Agricultural PV Systems and Electric Vehicles**” one week National Level online FDP authorized by All India Council for Technical Education (AICTE) at Vignan’s Lara Institute of Technology & Science from **25<sup>th</sup> November to 7<sup>th</sup> December 2024**.

- ❖ **Mr. M. Chandra Sekhar** has successfully participated & completed “**Agricultural PV Systems and Electric Vehicles**” one week National Level online FDP authorized by All India Council for Technical Education (AICTE) at Vignan’s Lara Institute of Technology & Science from **25<sup>th</sup> November to 7<sup>th</sup> December 2024**.

- ❖ **Mr. Sk. Abdul Kalam** has successfully participated & completed “**Agricultural PV Systems and Electric Vehicles**” one week National Level online FDP authorized by All India Council for Technical Education (AICTE) at Vignan’s Lara Institute of Technology & Science from **25<sup>th</sup> November to 7<sup>th</sup> December 2024**.

***KNOWWHATSPARKSTHELIGHTINYOU.THENUSETHATLIGHTTOILLUMINATETHEWORLD.***

# ELECTRA

SAVE energy-save earth  
JULY-2024 TO DECEMBER-2024

VOLUME- 8, ISSUE-2

❖ Mr. G. Naveen has successfully participated & completed “**Agricultural PV Systems and Electric Vehicles**” one week National Level online FDP authorized by All India Council for Technical Education (AICTE) at Vignan’s Lara Institute of Technology & Science from **25<sup>th</sup> November to 7<sup>th</sup> December 2024.**

❖

❖ **Mr. M. Chandra Sekhar** has successfully participated & completed “**Integrating Electric Vehicles with Smart Grids: Innovations for Sustainable Mobility Solutions**” one week National Level online FDP authorized by All India Council for Technical Education (AICTE) at Sri Venkateswara College of Engineering & Technology from **16<sup>th</sup> December to 21st December 2024.**

❖

**NPTEL Course Details :**

Name of the Faculty	Title	Course Duration
P.D.V.S K. Kishore	Python for Data Science	Jul-Aug, 2024
	Data Science for Engineering	Jul-Sep, 2024
Sk. Abdul Kalam	Introduction to Industry 4.0 and Industrial Internet of Things	Jul-Oct, 2024
G. Naveen	Introduction to Industry 4.0 and Industrial Internet of Things	Jul-Oct, 2024

P.Bramarambavathi	Introduction to Industry 4.0 and Industrial Internet of Things	Jul-Oct, 2024
P. Raghava Rani	Introduction to Industry 4.0 and Industrial Internet of Things	Jul-Oct, 2024
K.Silpa	The Joy of Computing Using Python	Jul-Oct, 2024
M.Gowthami	Cloud Computing	Jul-Oct, 2024

**WORKSHOP PROGRAM**

❖ The department of EEE& IQAC, Narasaraopeta Engineering College (Autonomous), Narasaraopeta Organized a two Week Practical Training Programme on “**MATLAB BASED POWER ELECTRONICS AND SIMU LINK**” in Association with Power Integrated Solutions, Trichy .

❖ from **19-08-2024 to 31-08-2024,**



❖ The IV B. Tech I Sem Students are participated in this workshop & it was explained by Mr. Madhan Kumar, Senior Technical Executive, Power Integrated Solutions.

# ELECTRA

SAVE energy-save earth  
JULY-2024 TO DECEMBER-2024

VOLUME- 8, ISSUE-2



❖ The department of EEE ,Narasaraopeta Engineering College (Autonomous), Narasaraopeta Organized a one week workshop on “PCB Designing & Fabrication” in Association with SRCE- Solutions,Vijayawada from 25-11-2024 to 30-11-2024

**Student Focus :**

**NPTEL Course Details:**



Year&Sem	Title	Course Duration	No. of Students Completed
IV-I	Cloud Computing	Jul-Oct, 2024	03
	Design, Technology and Innovation	Jul-Oct, 2024	01
	Introduction To Internet of Things	Jul-Oct, 2024	01
III-I	Cloud Computing	Jul-Oct, 2024	14
	The Joy of Computing using Python	Jul-Oct, 2024	01
	Introduction To Internet of Things	Jul-Oct, 2024	01

❖ The III B. Tech I Sem Students are participated in this workshop & it was explained by Mr. K. Sudhakar and SRC E- Solutions, Vijayawada.

# ELECTRA

SAVE energy-save earth  
JULY-2024 TO DECEMBER-2024

VOLUME- 8, ISSUE-2

## AICTE –PARAKH

- ❖ From II B. Tech, I Sem EEE, 34 Students have attended AICTE-PARAKH Student Learning Assessment and completed on their respective fields.



**Student Learning Assessment**  
ALL INDIA COUNCIL FOR TECHNICAL EDUCATION, NEW DELHI



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**Nindujerla sriram Bharath**  
(SLAS1546541)

2nd Year

ELECTRICAL AND ELECTRONICS  
ENGINEERING

NARASARAOPETA ENGINEERING  
COLLEGE (1-2146711)

Date : 20-12-2024

Type : Self-Assessment

Overall Rating

★★★★★

★★★★★ Excellent
★★★★☆ Very Good
★★★☆☆ Good

- ❖ From III B. Tech, I Sem EEE, 53 Students have attended AICTE-PARAKH Student Learning Assessment and completed on their respective fields.



**Student Learning Assessment**  
ALL INDIA COUNCIL FOR TECHNICAL EDUCATION, NEW DELHI



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**P BHANU PRAKASH**  
(SLAS1502060)

3rd Year

ELECTRICAL AND ELECTRONICS  
ENGINEERING

NARASARAOPETA ENGINEERING  
COLLEGE (1-2146711)

Date : 01-11-2024

Type : Self-Assessment

Overall Rating

★★★★★

★★★★★ Excellent
★★★★☆ Very Good
★★★☆☆ Good

- From IV B. Tech, I Sem EEE, 63 Students have attended AICTE-PARAKH Student Learning Assessment and completed on their respective fields



**Student Learning Assessment**  
ALL INDIA COUNCIL FOR TECHNICAL EDUCATION, NEW DELHI



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**NAPA PAVAN KUMAR**  
(SLAS1113423)

4th Year

ELECTRICAL AND ELECTRONICS  
ENGINEERING

NARASARAOPETA ENGINEERING  
COLLEGE (1-2146711)

Date : 13-09-2024

Type : Self-Assessment

Overall Rating

★★★★★

★★★★★ Excellent
★★★★☆ Very Good
★★★☆☆ Good

## STUDENT ACHIEVEMENTS :

- ❖ **M Venkata Sushwanth (22475A0207)**, of IV EEE has attended basic Mountaineering Course conducted by the National Institute of Mountaineering and Adventure Sports from **23-05-2024 to 19-06-2024** and secured Grading ‘A’ organized by 23 (A) BN, CHIRALA, GUNTUR GROUP NCC AP & T DIRECTARATE.



- ❖ **D.Naganjali (22475A0222)**, of IV EEE has won the **Third Prize** in the event of **ARTISTIC GROUP &** won the **Fourth Prize** in the event of **TRADITIONAL YOGASANA** organized by **South Zone Khelo India Yogasana Women’s Leauge 2024-25** held at Kongunadu College of Engineering & Technology, Tiruchirappalli from **31-08-2024 to 01-09-2024**.

# ELECTRA

SAVE energy-save earth  
JULY-2024 TO DECEMBER-2024

VOLUME- 8, ISSUE-2

## WORLD SPACE WEEK-2024



- ❖ **KVK Kaladhar (22475A0268) & E Praveen Gupta (22475A0269)** of IV EEE has won the **Third Prize** in the event of ” **WRITTEN QUIZ**” as a part of world space week 2024 celebrations organized by **SATISH DHAWAN Space Center (SHAR), ISRO Sriharikota** in Narasaraopeta Engineering College from **7-10-2024 to 9-10-2024**.



- ❖ **K.Janardhanbabu(24475A0202)& B.Veeranjaneyulu(24475A0201)**, of II EEE has won the **Second Prize** in the event of **Vinayaka Idol competition** conducted on the occasion of **Vinayaka chavithi** organized by Narasaraopeta Engineering College on **06-09-2024**.
- ❖ **A.Susmitha Lakshmi(22475A0225)** of IV EEE has won the **Third Prize** in the event of ” **JAM** ” organized by Narasaraopeta Engineering College on **12-09-2024**.
- ❖ **K. Janardhan babu (24475A0202)** of II EEE has won the **First Prize** in the event of ” **Picture Puzzle competition**” organized by Narasaraopeta Engineering College on **13-09-2024**.
- ❖ **N. Pavan Kumar (22475A0253) & G.MD.Ismail (22475A0214)** of IV EEE has won the **Second Prize** in the event of ” **Tech Trivia**” organized by Narasaraopeta Engineering College on **13-09-2024**.

### AcademicToppers :

- ❖ The following students are secured with highest marks in their respective semester results.



### I –B.Tech II–SEM

# ELECTRA

SAVE energy-save earth  
JULY-2024 TO DECEMBER-2024

VOLUME- 8, ISSUE-2



**II –B.Tech II–SEM**



**INDUSTRIAL VISITS :**

As a part of Academics students are required to visit industries in order to get the practical knowledge and Industrial exposure.

The III EEE students are visited Jindal Urban Waste Management (Guntur) Ltd, on 13-07-2024.



**ALUMINI INTERACTION:**

- ❖ The Alumni talk on “ URI POWER STATION”, NHPC by K.Raveendra Deputy Manager had delivered A Technical Talk on 21-10-2024 to II & III B.Tech students

Newsletter of Electrical and Electronics Engineering Department

## ELECTRA

SAVE energy-save earth  
JULY-2024 TO DECEMBER-2024

VOLUME- 8, ISSUE-2

- ❖ The II EEE students are visited Jindal Urban Waste Management (Guntur) Ltd, on **19-10-2024**.



- ❖ CRT-Training Program is conducted for II B. Tech EEE Students from **19-8-2024 to 14-12-2024** organized by Bytexl team.

### TRAINING PROGRAMS ORGANIZED

- ❖ Accenture Specific Training Phase 2 Program is conducted for IV B. Tech EEE Students from **18-7-2024 to 31-7-24** organized by Bytexl team.



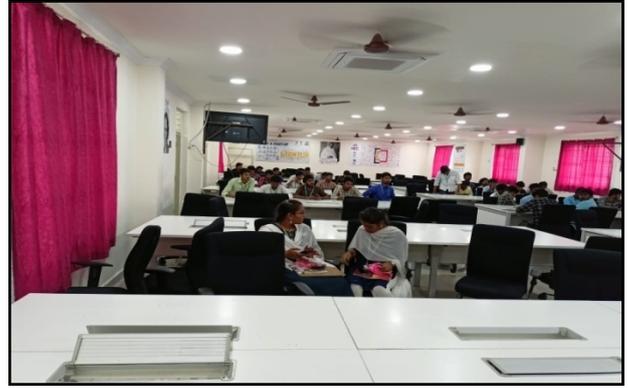
- ❖ CRT-Training Program is conducted for III B. Tech EEE Students from **8-5-2024 to 26-10-24** organized by Bytexl team.

- ❖ Accenture PINCO App & Coding Practice Sessions Program is conducted for IV B. Tech EEE Students from **18-9-2024 to 21-9-24** organized by Bytexl team.

# ELECTRA

SAVE energy-save earth  
JULY-2024 TO DECEMBER-2024

VOLUME- 8, ISSUE-2



- ❖ Accenture Specific Training Phase 3 Program is conducted for IV B. Tech EEE Students from **23-9-2024 to 28-9-24** organized by Dr. Ananda Olivetti.

## ALUMNIVOICE :

I feel fortunate to be a student of Narasaraopeta Engineering College as it helped me to both on personal and professional front. It inculcated a lot of intra and interpersonal skills which helped me in all around development. Teaching by the senior faculty and the field exposure in my college life has helped me a lot in securing a good job. Personal care towards me by the faculty members has helped me in qualifying the competitive exams at national level. I thank the management of the college for providing necessary materials and books in the library to face the competitive world.



- ❖ Accenture Communication Building and Interview Program is conducted for IV B. Tech EEE Students from **26-9-2024 to 10-10-24** organized by Internal Team.



20471A0221

Trainee Engineer

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JULY-2024 TO DECEMBER-2024

VOLUME- 8, ISSUE-2

## **STUDENT'S VOICE:**

I feel very blessed to be an Electrical Engineering student in Narasaraopeta Engineering College. Our faculty who are inspiring the future technologies, they taught us technical strategies and teach classes in a practical manner and encourage each student's interest. Our back bone is our HOD Dr.SK.Md.Shareef sir who encourages the student ideas and creates a platform to develop their thoughts.



**21475A0224**  
**II EEE**