ANDHRA LOYOLA INSTITUTE OF ENGNEERING AND TECHNOLOGY

(Approved by AICTE, Accredited by NAAC, NBA, Affiliated to JNTUK, Kakinada)

An ISO- 9001:2015 Certified Institution

Department of Electrical & Electronics Engineering

Departmental Events for Academic Year 2021-22

The department collaborated with the Placement and Counselling Cell. The recruitments organized by the Placement and Training Cell during the academic year 2021-22.

| | | NAME OF THE | INSTITUTION/UNI | 11/ |
|------|--------------------------|--|--|--|
| S.no | Date of organised | SPEAKER DESIGNATION | VERSITY/ORGANI ZATION | Event Name |
| 1 | 20th Dec 2021 | Mr. M RAMA KRISHNA | POWER GRID CORPORATION OF INDIA LIMITED | INDUSTRIAL VISIT |
| 2 | 8th Dec 2021 | Mr M RAMESH KUMAR | an industrial visit to ELECTRIC LOCO SHED, VIJAYAWADA. | INDUSTRIAL VISIT |
| 3 | 21st Sep 2021. | FROM SKILLDZIRE | 500 kwp solar plant | virtual industrial tour |
| 4 | 26th to 30th Oct 2021 | From ALIET | ALIET | APPLICATIONS OF MATLAB IN ELECTRICAL ENGINEERING |
| 5 | 5th & 6th of Oct 2021 | FROM SKILLDZIRE | SkillDzire | workshop on EV Technology |
| 6 | 14th March 2022 | Jitendra Tiwari | from MADE EASY | Guest Lecture on Strategy to crack Gate and other competitive exams |
| 7 | 18th May 2022 | G. Gopal Rao, professor | from Anna University | Guest Lecture on Carrier Guidance |
| 8 | 31st March 2022 | T.Satyanarayana Murthy Deputy engineer | APTRANSCO | Guest Lecture on Load Dispatch |

| 9 | 30-04-2022 | From ALIET | ALIET | Technical Quiz |
|----|--------------------------|------------|------------------------|---|
| 10 | 26th May 2022 | From ALIET | ALIET | PROJECT EXPO- 2K22 |
| 11 | 26th of October 2021. | From ALIET | st.Josephs ITI college | Identification and Rectification of Faults in Electrical Home Appliances |
| 12 | 4th December 2021 | From ALIET | ALIET | Give them a Hand Up rather than a Hand Out |
| 13 | 13th November202 1 | From ALIET | ALIET | World Diabetes Day |
| 14 | 14th October 2021 | From ALIET | ALIET | World Vision Day |
| 15 | 12th April 2022 | From ALIET | ALIET | International Street Children's Day |
| 16 | 4th june 2022 | From ALIET | ALIET | Reunir-2022 |

List of Publications in Journals & Conferences:

- V. Anantha Lakshmi, T.R.Jyothsna, —Power Quality Enhancement of a Grid System Using AI Based Custom Devices, Journal of Green Engineering (JGE), Volume-11, Issue-3, March 2021, http://www.jgenng.com/wpcontent/uploads/2021/3/volume11-issue3-51.pdf.
- V. Anantha Lakshmi, T.R. Jyothsna, —Stability Improvement in Hybrid System Using Optimization Technique based DPFC Controller, The Journal of Engineering (Provisionally Accepted).
- V. Anantha Lakshmi and T. R. Jyothsna, —A Novel Unified Power Quality Conditioning System on Line Loading Losses and voltage stability of smart buildings, International Conference on smart grids structure and materials, held on 19th -20th April 2021, KLEF, Vijayawada.
- Ajay Kumar Moodadla, Nitheesh Kumar M, "Design and Analysis of Wind Power Plant Screen using SCADA", Journal of Chengdu University of Technology, Vol.26, No.8, pp.1-13, July 2021.
- Ravi Kiran Dasari, Godwin Immanuel, "A Novel Cluster Switched Inductor Based High Step-Up Hybrid DC-DC Converter", Electr Eng (2021). <u>https://doi.org/10.1007/s00202-</u> 021-01439-7 (Springer - SCI, Web of Science indexed)2.
- Ravi Kiran Dasari, Dr. D. Godwin Immanuel, "Closed-Loop High-Gain DC-DC Converters for Renewable Energy Source Application" Published in Advances in Intelligent Systems and Computing, Springer, Volume 1369, 2021, pp 407-421. (SCI, Web of Science indexed
- Ravi Kiran Dasari, Godwin Immanuel, "Photo Voltaic Hybrid Boost Converter Fed Switched Reluctance Motor Drive for Electric Vehicle Application", International Journal of Power Electronics and Drive System (IJPEDS), Vol. 13, No. 1, pp. 275-288,March 2022. DOI: 10.11591/ijpeds.v13.i1.pp275-288 (Scopus indexed)
- Ravi Kiran Dasari, Godwin Immanuel, ""Analysis of Solar Integrated Symmetrical Hybrid Switched-Inductor DC-DC Converter Fed SRM Drive for Electric Vehicle Application", Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban) / Journal of Tianjin University Science and Technology, pp. 665-677, Vol. 55, Issue 04, ISSN: 0493- 2137, April 2022. (Citescore 0.8, SJR 0.22, SNIP 0.396), DOI: 10.17605/OSF.IO/XHSC4, (Scopus indexed)
- Ravi Kiran Dasari, Dr. D. Godwin Immanuel, "Comprehensive Review of Single Switch DC-DC Converters for voltage lift in RES application", International Conference on power, Energy, Control and Transmission Systems (IEEE - ICPECTS), Chennai, 2018.
- B. Srinivasa Rao, Krishna Mohan Tatikonda, Anu Shukla, K. Kanakaraju, "Implementation of Hybrid MPPT for Grid-Connected Hybrid System", Journal of Xi'an University of Architecture & Technology, VOLUME XIV, ISSUE VI, JUNE 2022, Page No: 61-73.

- \succ Krishna Mohan Tatikonda, Udaya K. Renduchintala, Chengzong Pang, and Lin Yang, "ANFISfuzzy logic based UPQC in interconnected microgrid distribution systems: Modeling, simulation and implementation," 2021 The Authors. The Journal of Engineering published by John Wiley & Sons Ltd on behalf of The Institution of Engineering and Technology. https://doi.org/10.1049/tje2.12005.
 - Tulasichandra Sekhar Gorripotu, Krishna Mohan Tatikonda, B. Omkar Lakshmi Jagan, "IMPLEMENTATION OF HYBRID MPPT FOR GRID-CONNECTED HYBRID SYSTEM", International Journal of Advanced Science and Technology, Vol. 29, No. 6, (2020), pp. 3451-3458.
 - T. Eswara Rao, Krishna Mohan Tatikonda, S. Elango, and J. Charan Kumar, "MICROGRID TECHNOLOGIES", Edited by C. Sharmeela, P. Sivaraman, P. Sanjeevi kumar, and Jens Bo Holm-Nielsen, Scrivener Publishing, Wiley Publications, ISBN: 978-1-119-71079-0, April 2021, Pg:287-308.
 - Dr. B. Srinivasa Rao, T. Krishna Mohan, B. Ravi Shankar, B. Omkar Lakshmi Jagan, "Hybrid CS-ALO Mppt For Grid-Connected Photovoltaic System", "International Conference on Smart Grids Structures and Materials (Springer Lecture Notes in Electrical Engineering)" held on 19th and 20th April 2021 at KLEF, Vijayawada.
 - B. Srinivasa Rao, Krishna Mohan Tatikonda, Anu Shukla, "Implementation of Hybrid BAT-PO MPPT for Grid-Connected Hybrid System", Microgrid System: Artificial Intelligence-Based Energy-Efficient Optimization, published by CRC Press (Taylor and Francis). Accepted
 - Krishna Mohan Tatikonda, "Implementation of a Novel 51- Level Asymmetrical Cascaded Multilevel Inverter for Photo-Voltaic Application", 2nd International Conference on Innovations in Energy Management and Renewable Resources IEMRE – 2022 (IEEE Digital Library) organized by Institute of Engineering & Management, Kolkata on 25th - 27th February 2022.

INDUSTRIAL VISITS

Department of Electrical Engineering has organized an industrial visit to POWER GRID CORPORATION OF INDIA LIMITED, NUNNA for 3rd Year B. Tech Electrical students. Totally 66 students along with 2 faculty members visited the Industry on 20th Dec 2021. The authorities of the grid were allotted two Professionals who were expertise in the area of grid control and management, the professionals had explained about all the components and their working.

Some of the components they had seen in the power grid are current transformer, SF6 circuit breakers, Inductive reactors in different ranges, Lightening arrestors, control panels etc. the visit was really helpful for the students to know about different electrical equipment's which are used in power grid for transmission and protection.

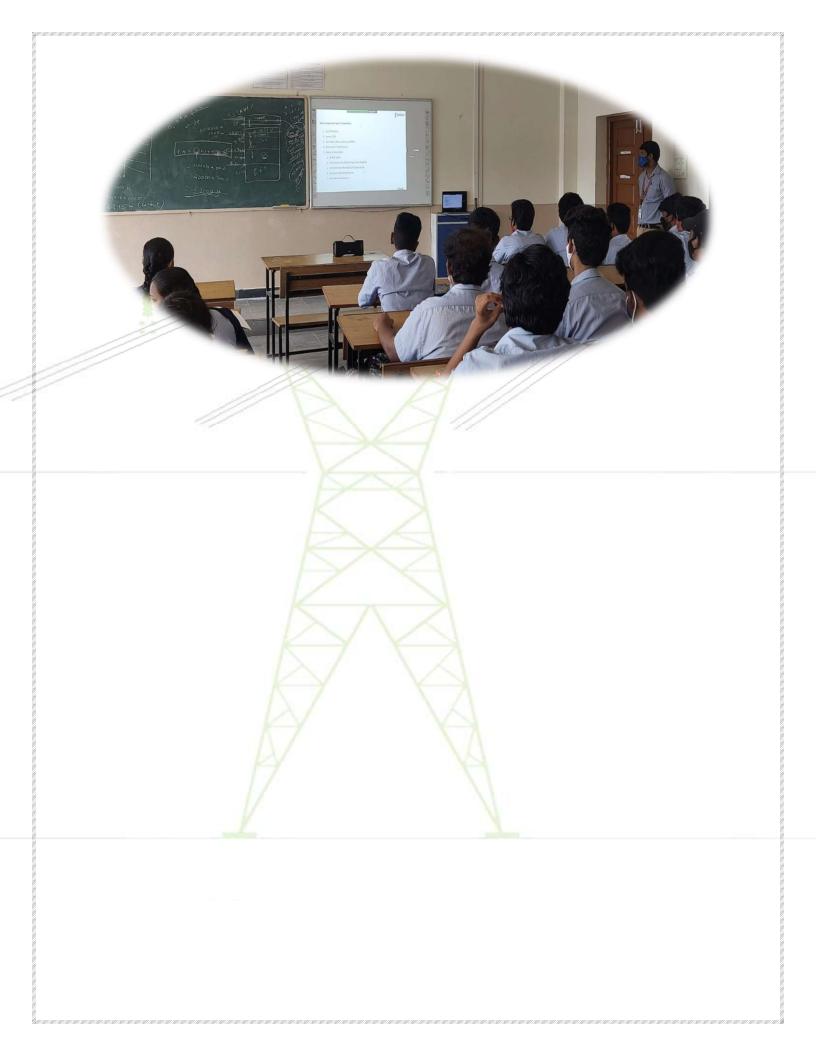


The Department of Electrical Engineering organized an industrial visit to ELECTRIC LOCO SHED, VIJAYAWADA forth 4th Year B.Tech. Electrical students (63) along with 2 faculty members visited the Industry on 8th Dec 2021. The purpose of our industrial visit is to get a practical view about windings i.e., in motors. Throughout our visit we saw the manufacturing of motors and its inner parts, mainly how the windings are wounded in a motor. Railway electric traction describes the various types of locomotive and multiple units that are used on electrification systems around the world. It uses DC series motor for the engine and in traction it uses three phase induction motor for regenerative braking purpose.



The Department of Electrical Engineering organized an virtual industrial tour of 500 kwp solar plant **for 3rd &** 4th Year B.Tech. Electrical students in association with SkillDzire on 20th & 21st Sep 2021.





WORKSHOPS ATTENDED BY STUDENTS

Workshop on Applications of MATLAB

Michael Faraday Research Centre, an initiation of the Department of Electrical & Electronics Engineering, organized A FIVE DAY TECHNICAL WORKSHOP On APPLICATIONS OF MATLAB IN ELECTRICAL ENGINEERING on 26th to 30th Oct 2021. The event was inaugurated at 9.00 A.M. around 50 students from various colleges participated in this workshop.



The students of 3rd & 4th EEE were participated in national level free workshop on EV Technology organised by SkillDzire on 5th & 6th of Oct 2021.



GUEST LECTURES

The Department of Electrical and Electronics Engineering has conducted a Guest Lecture on 14th March 2022 on **"Strategy to crack Gate and other competitive exams".** It was delivered by **Jitendra Tiwari**, educationalist by profession from MADE EASY, for the students of 2nd, 3rd & 4th year EEE. the programme conducted at NSH, ALIET at 2:30 pm. More than 120 students were participated in the programme and students stated that the programme was very useful for their career enhancement



The Department of Electrical and Electronics Engineering has conducted a Guest Lecture on 18th May 2022 on **"Carrier Guidance".** It was delivered by **G. Gopal Rao**, professor from Anna University, for the students of 2nd, 3rd & 4th year EEE. the programme conducted at NSH, ALIET at 2:30 pm. More than 120 students were participated in the programme and students stated that the programme was very useful for their career enhancement



The Department of Electrical and Electronics Engineering has conducted a Guest Lecture on 31st March 2022on "**Load Dispatch**". It was delivered by T.Satyanarayana Murthy Deputy engineer,APTRANSCO, for the students of 2nd, 3rd & 4th year EEE. the programme conducted at NSH, ALIET at 2:30 pm. The programme was very helpful for the students for their technical growth on power systems

Technical Quiz

The Department of Electrical and Electronics Engineering conducted Technical Quiz competition for 2nd, 3rd and 4th year students on 30-04-2022. The quiz was organized by the faculty in-charge Mr. M Rama Krishna.

A total of 47 students registered for the Quiz competition. The students were divided into 5 teams (each consisting of four students) and the team with the highest score was declared the winner of the contest.

| S No | Position | Roll Number | Year | |
|------|----------|-------------|----------|--|
| 1 | | 20HP1A0205 | II YEAR | |
| | I | 20HP1A0235 | II YEAR | |
| | | 19HP1A0218 | III YEAR | |
| | | 19HP1A0232 | III YEAR | |
| 2 | | 20HP1A0205 | II YEAR | |
| | II | 20HP1A0205 | II YEAR | |
| | | 20GP5A0229 | III YEAR | |
| | | 19HP1A0216 | III YEAR | |
| 3 | ш | 20HP5A0214 | III YEAR | |
| | | 20HP5A0220 | III YEAR | |
| | | 20HP1A0239 | II YEAR | |
| | | 20HP1A0236 | II YEAR | |
| | | | | |



PROJECT EXPO-2K22

Under IQAC the Department of Electrical & Electronics Engineering organized an exhibition of engineering projects on 26^{th} May 2022. The projects were designed and developed by the students of final year. The students of 2^{nd} and 3^{rd} year interacted with final year students regarding their projects. The event was found to be very informative for the 1^{st} , 2^{nd} & 3^{rd} year students

EXTENSION PROGRAMS

The NSS unit of Andhra Loyola Institute of Engineering and Technology organized a program on "Identification and Rectification of Faults in Electrical Home Appliances" at st.Josephs ITI college in Gunadala on 26th of October 2021.

The students from EEE Department participated actively in this program. The NSS students shared their knowledge to the ITI students about the different Electrical Home Appliances. The students took three Electrical Home Appliances (Ceiling Fan, Mixer Grinder and Room Heater) and explained their Internal Parts, Wiring Diagram and Working. The students also explained about different faults observed in each appliances and how to rectify them.



The NSS unit of Andhra Loyola Institute of Engineering and Technology organized a program to help needy people. In this regard, our NSS unit planned a program "Give them a Hand Up rather than a Hand Out" which is held on 4th December at Gunadala, BRTS Road, Railway Station and KR Market.

The importance of conducting this event to help the people and needy people. The students of the EEE Department came forward to donate for the poor people with the slogan in the Mind **"A little help with a little smile gives meaning to human life".** The students of the EEE department participated actively in this program. The NSS Students distributed the blankets to the people who do not have accesses to basic amenities like food and clothing.





The NSS unit of Andhra Loyola Institute of Engineering and Technology organized a program on the occasion of "**World Diabetes Day**". The **NSS unit** planned a program "World Diabetes Day" which is held on 13th **November at Autonagar.**

The importance of the "World Diabetes Day" is to spread awareness about diabetes mellitus. The students from EEE Department participated actively in this program. The NSS Students explained about the problems of having diabetes and invited people from surrounding places to utilize the "Free Medical Camp".









The NSS unit of Andhra Loyola Institute of Engineering and Technology organized a program on the occasion of "**World Vision Day**". The **NSS unit** planned a program "World Vision Day" which is held on second Thursday of October i.e. on 14th October at Autonagar.

The importance of the "World Vision Day" is to create awareness to focus attention on and encouraging everyone to think about the importance of their own eye health which impacts on education, employment, quality of life, poverty of life and so other sustainable development goals. The students from EEE Department participated actively in this program. The NSS Students invited people from surrounding places to utilize the "Free Medical Camp".







The NSS unit of Andhra Loyola Institute of Engineering and Technology organized a rally program in collaboration with the Indian Railways Child Line, Vijayawada Division on 12th April 2022 on the occasion of "**International Street Children's Day**". The importance of the "International Street Children's Day" is to create awareness about the street children and support the vital recognition on their rights. The students from EEE Department participated actively in this rally program and created awareness on 4-steps adopted by the "Consortium for street children" to support them.







STUDENT INTERNSHIPS

| S. No | Roll Number | Name | Institution/ Organization | Internship Title Name |
|-------|-------------|--------------------------------|---|-------------------------------|
| | | Penamakuri Sri Sai Ramana | | |
| 1 | 19HP1A0237 | Lokesh | | |
| 2 | 20HP5A0216 | Kornu. Karthik | Pancech Solutions | Internet Of Things (IOT) |
| 3 | 19HP1A0236 | B. Sivasankar | Skill Dzire | Artificial Intelligence |
| 4 | 19 HP1A0234 | Yesapogu Samuel Hanock | MADE | |
| 5 | 19HP1A0207 | Puja Iswarya S | Vi Solutions | About Power Electronics |
| 6 | 21HP5A0216 | Kattamuri Indra Pavan Kumar | Pantech E Learning | IOT With Machine Learning |
| 7 | 19HP1A0223 | P Manoj Venkat | Skill Dzire | Internet Of Things |
| 8 | 19HP1A0211 | Sneha Konapaneni | 1 11 | |
| 9 | 20HP1A0238 | Balijepalli Rahul | A 11/ | |
| 10 | 20HP5A0203 | Lakshmi Prasanna | Skill Dzire | Embedded System For Python |
| 11 | 19HP1A0212 | Talupula Tejaswini | Skill Dzire | Solar PV Plant Design |
| 12 | 20HP1A0203 | Balijepalli Divya | Skill Dzire | |
| 13 | 19HP1A0206 | Penumaka Pragna | Skill Dzire | Solar PV Plant Design |
| 14 | 21HP5A0206 | Mondru.Balu | Pantech E Learning | IOT With Machine Learning |
| 15 | 20HP1A0242 | Panem Satya Mojesh | Pantech E Learning | IOT With Machine Learning |
| 16 | 19HP1A0209 | Sindhuri Reddy | Skill Dizer | 3d Design |
| 17 | 19HP1A0201 | M.Abdul Farhan Bano | Andhra Loyola College | Ev |
| 18 | 20HP5A0217 | Anupoju Kishore | IEEE | IOT With Machine Learning |
| 19 | 20HP1A0217 | Ch.Bharatwaraj | IEEE | |
| 20 | 20HP1A0243 | A.Siva Rama Teja | Brain O Vision Solutions (India) Pvt Ltd | Web Development |
| 21 | 21HP5A0202 | Chintala Bhargavi | Pantech | Electric Vehicles |
| 22 | 20HP1A0202 | Chidrupinilaya Mudili | Pantech Company | Electric Vehicles |
| 23 | 21HP5A0219 | Yandamuri Mohith | Pantech | Electric Vehicles |
| 24 | 21HP5A0214 | Tungala Akash Charan | Pantech E Learning | IOT Machine Learning |
| 25 | 19HP1A0241 | S.Vasanth Prakash | | |
| 26 | 20HP5A0218 | Gudelli Lakshman | IEEE | IOT With Machine Learning |
| 27 | 20HP5A0201 | Gadam. Bharathi | IEEE | IOT With Machine Learning |
| 28 | 21HP5A0213 | Vasavi Patibandla2 | Pantech | Electric Vehicles |