

NEC INAKASARAOPETA ENGINEERING COLLEGE

NEWS LETTER ELECTRA

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July to Dec 2021 Volume-5, Issue-2

Department of ELECTRICAL AND ELECTRONICS ENGINEERING



ELECTRA

NO RESISTANCE CAN DROP OUR POTENTIAL JULY-2021 TO DECEMBER-2021

VOLUME-5, ISSUE-2

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Vision

To produce innovative, comprehensively trained, socially responsible electrical engineers and researchers of the highest quality to contribute to the nation's impacSt on the world.

Mission

- To provide knowledge-based services and technologies to meet the needs of Society
- To help in building national capabilities for excellent energy management and to explore non-conventional energy sources
- To form a research-oriented culture and provide competent consultancy to the Industry
- To create and sustain an environment of learning in which students transform theory into practice with due consideration of ethical and economic issues
- To be accountable through self-evaluation and continuous improvement

New Trend

ENERGY-SAVER LIGHTING TECH

A few years ago, LED lamps were super expensive, a situation that forced most people to consider other options. Fortunately, with the recent advances in electrical engineering, that's not the case anymore.



According to reports, energy-saver bulbs consume less than 80% of the energy required by conventional light bulbs. And the best part, today they are also affordable. Energy-saver bulbs save each home an average of 100 dollars in utility bills annually. With the continuous improvement of this energy-saving technology, LED bulbs are expected to become the standard in 2021 and beyond.

Faculty Focus

International Journals:-

Sk. Md. Shareef "Reactive Power Compensation in A Grid-Tied PV System By Fuzzy Logic Controller" by The International journal of analytical and experimental modal analysis, Volume XIII, Issue VIII, August/2021 ,ISSN NO:0886-9367 ;Page No: 1611-1618.

International Conferences:-

- M. Chandra Sekhar "Auto Tracing and Identification of Distribution Feeder Illness and controlling of loss of crop and living being using Tilt angle and LoRa module" ISBN: 978-93-11420-11-6.
- G.Naveen "Torque Ripple and Harmonics Reduction of Brushless DC Motor (BLDCM) Using Cascaded H-Bridge Multilevel Inverter" ISBN: 978-93-11420-11-6.
- 3. G.Naveen "DTC Control Strategy for Doubly Fed Induction Machine" ISBN: 978-93-11420-11-6.
- P.Bramarambavathi. "DTC Control Strategy for Doubly Fed Induction Machine" ISBN: 978-93-11420-11-6.
- M.Subramanayam "A New Fuzzy logic Controlled Doubly Fed Induction Generator with Integrated Active Filter Capabilities For Wind Energy Conversion Systems" ISBN: 978-93-11420-11-6.
- Sunil Babu Jyothi "Fuzzy Control Of Hybrid Solar And Wind System For Optimized Battery Charging At Pre-Post Fault Conditions" ISBN: 978-93-11420-11-6.
- Galla Naga Raju "Power Quality Issues in Medical Diagnosis Equipment" ISBN: 978-93-11420-11-6.
- M.Chandra Sekhar "Distinctive Power Converter Strategy for Distributed Generation System" ISBN: 978-93-11420-11-6.
- Sk.Karimulla "Design Of The Solar Converter Reconfiguration Under Pv Battery Power Conversion" ISBN: 978-93-11420-11-6.
- G.Naveen "Torque Ripple Minimization in Neutral-Point Clamped Three-Level Inverter Fed Induction Motor Drives Operated at Low-Switching-Frequency"; ISBN: 978-93-11420-11-6.



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- M.Subramanyam "Photovoltaic Based PMDC Motor Drive System using MPPT" ISBN: 978-93-11420-11-6
- P.D.V.S.K.Kishore "Efficiency and Ripple Factor comparison of DC-DC Converters" ISBN: 978-93-11420-11-6.
- Sk.Karimulla "Design and Development of a Static VAR Compensator for Load Compensation Using Real Time Digital Simulator and Hardware" ISBN: 978-93-11420-11-6.
- 14. Sk Md Shareef "PV Integrated Fuzzy Controlled UPQC Under Unbalanced And Irradiance Conditions" ISBN: 978-93-11420-11-6.
- P.D.V.S.K.Kishore "Sensor less voltage control of CHB Multilevel inverter fed three phase induction motor with one DC source per each phase- B.Praveen Kumar, ISBN: 978-93-11420-11-6.
- B.Praveen Kumar "Sensor less voltage control of CHB Multilevel inverter fed three phase induction motor with one DC source per each phase-, ISBN: 978-93-11420-11-6.

Faculty Patents

 Dr.P.Lakshmanan has patent on BI-LEVEL ENERGY MANAGEMENT SYSTEM WITH GRID REINFORCEMENT FOR SOLAR ENERGY, Application Number: - 2021105856, Publication Date:-03-11-2021

Faculty Newly Appointed

- Mr.SK.Abdul Kalam newly joined as Assistant Professor 01/09/2021.
- G.Narasimha Rao newly joined as Assistant Professor 15/09/2021
- P.Bramarambavathi newly joined as Assistant Professor 01/10/2021

FDPs Attended:-

- Dr.P. Lakshmanan attended Certified on Online Elementary FDP on "Power Electronic Systems & its Real time control Instrumentation in DSP" by Virtually from 08-11-2021 to 12-11-2021 organized by AICTE Training & Learning (ATAL) Academy.
- Dr.P. Lakshmanan attended 5-Day online FDP on "Inculcating Universal Human Values in Technical Education"" by Virtually from 04-10-2021 To 08-10-2021 organized by AICTE New Delhi.

- Dr.P. Lakshmanan attended FDP on "Annual Refresher Program in Teaching" on 13-10-2021organized by MHRD & NTA
- Dr.P. Lakshmanan attended one Month Course on "Innovation Ambassador Training(Foundation level)" 30-06-2021 to 30-07-2021 organized by MoE's Innovation cell & AICTE.
- Mr. SK.MD.Shareef_attended One week online FDP on "AI, Machine Learning, Deep Learning & Automation Applications in Electrical Datasets: Theory to Hands on Practice" by Virtually 05-07-2021 To 10-07-2021 organized by Sasi Institute of Tech.& Engg, Tadepalligudem
- Mr.P.D.V.S.K.Kishore_attended Five day online FDP on "Recent Advances in Power Electronics and Power Systems" by Virtually 10-11-2021 To 15-11-2021 organized by LBRCE Department of EEE, Mylavaram
- Mr.G Naga Raju_attended Online two week STTP on "Emerging Technologies in Electric Vehicles" by Virtually 02-08-2021 To 14-08-2021 organized by Department of EEE Bapatla Engineering College
- Mr.G Naga Raju attended One Week online STTP on (STTP-Phase-III) "Simulation tools for Electrical Engineering & its real time Applications" by Virtually 28-06-2021 To 03-07-2021 organized by Department of EEE KHIT,Guntur
 - Mr. M. Chandra Sekhar_attended Online two week STTP on "Emerging Technologies in Electric Vehicles" by Virtually 02-08-2021 To 14-08-2021organized by Department of EEE Bapatla Engineering College<</p>
 - Mr.B.Praveen Kumar attended AICTE Training & Learning (ATAL) Academy Certified on Online Elementary FDP on "Internet of Things-Industry Trend" by Virtually 25-10-2021 To 29-10-2021 organized by Department of EEE Jyothi Institute of Technology Bangalore.
 - Mr.G.Naveen attended Five day online FDP on "Recent Advances in Power Electronics and Power Systems" by Virtually 10-11-2021 To 15-11-2021 organized by LBRCE Department of EEE, Mylavaram.
 - ✤ Mr.SK.Karimulla_attended Certified on Online Elementary FDP on "IOT Applications in Renewable Energy" by virtually 22-11-2021 To 26-11-



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2021organized by AICTE Training & Learning (ATAL) Academy. NSS College of Engineering, palakkad.

- Mr.SK.Karimulla attended Certified on Online Elementary FDP on "Internet of Things" by Virtually 25-10-2021 To 29-10-2021 organized by AICTE Training & Learning (ATAL) Academy,Sri Vidyaniketan Engineering College,Tirupathi
- Mr.SK.Karimulla attended Certified on Online Renewable Energy System Master class" by Virtually 17-10-2021 to 16-11-2021 organized by APSSDC-Pantech e Learning.
- Mr.SK.Karimulla attended AICTE Recognized FDP on "Basics of MATLAB & Simulink" by Virtually 19-07-2021 To 23-07-2021organized by Dept of EEE NITTTR, Chandigarh

WORKSHOPS:-

 Mr. SK.MD.Shareef_attended Five day National level online Workshop on "MATLAB & its Applications for Project Devolopment in Electrical Engineering" by Virtually from 26-10-2021 to30-10-2021 organized by Vignans Nirula Institute of Technology & Science for Women

ORGANIZED PROGRAMS:-

 Under ISTE Student Chapter, The department of EEE organized a Webinar on "Advances in energy storage

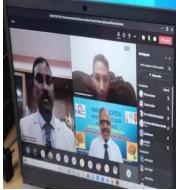
devices for Electric Vehicle" on 10-06-2021 from 02:00 PM to 03:30



PM. All the students & Faculty possessing ISTE membership have attended this webinar. The resource person for this webinar was Mr. Ujjval B Vyas, a research scholar at SVNIT Surat. A total of 113 students & Faculty participated in this event.

The Department of EEE Organized a webinar on "Career Opportunities after B.Tech_EEE @ Narasaraopeta Engineering College(Virtual) on 25-06-2021. The Resource person for this webinar was Mr. P.Ramesh Faculty of ACE Engineering Academy. Department of EEE organised a Virtual international conference on 'Recent Trends in power systems and power Electronics' (NEC-VICPSPE-2K21) on 28-29th July 2021.







BOOKS AUTHORED BY FACULTY:-

- Mr.SK.MD.Shareef author of the Text Book Electrical Circuit Analysis-1 ISBN No:- 978-81-948687-6-7, Publisher:- Spectrum Date of Publications:- August-2021
- Mr.M.Chandrasekhar author of the Text Book Electrical Circuit Analysis-1 ISBN No:- 978-81-948687-6-7, Publisher:- Spectrum Date of Publications:- August-2021.
- Mr.J.Sunil Babu author of the Text Book Network Analysis ISBN No:- 978-81-948787-2-8, Publisher:-Spectrum Date of Publications:- August-2021
- Mr.G.Nagaraju author of the Text Book Network Analysis ISBN No:- 978-81-948787-2-8, Publisher:-Spectrum Date of Publications:- August-2021.
- Sk.Karimulla author of the Text Book Elements of Electrical & Electronics Engineering ISBN No:- 978-81-948687-9-8, Publisher:- Spectrum Date of Publications:-August-2021



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MoU'S :-

- Department has MOU Signed with Lineysha & Thevan Software Technologies Pvt. Ltd. Vijayawada for the Activity Acadamic Cooperation in areas of mutual Interest From 24-11-2021
- Department has MOU Signed with Avodha Edutech Pvt. Ltd, Bangalore for the Activity ,Educational & Training Activities, Exchange of Students & faculty for Training & coaching... etc.From 29-11-2021
- Department has MOU Signed with Eduskills (Nation building through skills) for the Activity , Create awareness for adoptation and registration of Technical courses from interested students.From 24-11-2021.
- Department has MOU Signed with Axis Global Institute of Industrial Training(AGIIT), Chennai for the Activity, Industrial Training & Visits,Guest Lectures,Placement of Trained Students.From 30-08-2021

STUDENT FOCUS

PAPERS PRESENTED

- M.Harika IV EEE Paper Presented on "Control Methodology For A Grid Connected Isolated PV Diesel Microgrid" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.
- P.John Luke IV EEE Paper Presented on "Control Methodology For A Grid Connected Isolated PV Diesel Microgrid" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.
- B.Ajay Kumar IV EEE Paper Presented on "Control Methodology For A Grid Connected Isolated PV Diesel Microgrid" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.
- K.Naga Deepthi IV EEE Paper Presented on "Analysis and Comparison of the DC-DC Converters for Reducing Current ripple and Improving Efficiency " in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.

- CH. Harsha IV EEE Paper Presented on "Analysis and Comparison of the DC-DC Converters for Reducing Current ripple and Improving Efficiency " in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.
- M.Ravi Teja IV EEE Paper Presented on "Analysis and Comparison of the DC-DC Converters for Reducing Current ripple and Improving Efficiency " in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.
- M.Madhavi IV EEE Paper Presented on "Comparison of Harmonics and THD Suppression with Three and 5 Level Cascaded H-bridge Multilevel Inverter" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.
- Sk.Nagur Basha IV EEE Paper Presented on "Comparison of Harmonics and THD Suppression with Three and 5 Level Cascaded H-bridge Multilevel Inverter" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.
- ★ K Manasa IV EEE Paper Presented on "Comparison of Harmonics and THD Suppression with Three and 5 Level Cascaded H-bridge Multilevel Inverter" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet
- A.Sai Krishna IV EEE Paper Presented on "Control of UPQC Using Linear Kalman Filter for Power Quality Problems" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.
- G. Praveen kumar IV EEE Paper Presented on "Control of UPQC Using Linear Kalman Filter for Power Quality Problems" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet



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- A.N.V.D. Tarun IV EEE Paper Presented on "Control of UPQC Using Linear Kalman Filter for Power Quality Problems" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.
- G. Yashwanth Krishna IV EEE Paper Presented on "Control of UPQC Using Linear Kalman Filter for Power Quality Problems" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.
- M. Ravi kumar IV EEE Paper Presented on "A Fuzzy Logic Based Cascaded H-Bridge 15 Level Multi Level Inverter" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.
- J.Pothu Raju IV EEE Paper Presented on "A Fuzzy Logic Based Cascaded H-Bridge 15 Level Multi Level Inverter" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet
- V. Ramakrishna IV EEE Paper Presented on "A Fuzzy Logic Based Cascaded H-Bridge 15 Level Multi Level Inverter" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet
- S.Akhil Kumar IV EEE Paper Presented on "A Fuzzy Logic Based Cascaded H-Bridge 15 Level Multi Level Inverter" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.
- Kakumanu Sailaja IV EEE Paper Presented on "Wireless Power Transfer Technology " in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.

- T.Tejaswini IV EEE Paper Presented on "Wireless Power Transfer Technology " in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet
- B. Koteswara Rao IV EEE Paper Presented on "Effect of Power Quality Issues in Power System and Its Mitigation by Power Electronics Devices" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet
- Pavan Kalyan. G IV EEE Paper Presented on "Effect of Power Quality Issues in Power System and Its Mitigation by Power Electronics Devices" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet.
- A.Purna Chandra Rao IV EEE Paper Presented on "Efficiency and Ripple Factor comparison of DC-DC Converters" in Virtual International Conference On Recent Trends in Power Systems and Power Electronics (NEC-VICPSPE-2k21) on 28/07/2021 & 29/07/2021 Organized by Department of EEE, Narasaraopeta Engineering College, Narasaraopet
- Shaik Sharukh IV EEE Paper Presented WON 1ST Prize in ISTE TECHNICAL EVENT on 04/09/2021 Organized by ISTE CHAPTER, Narasaraopeta Engineering College, Narasaraopet.
- Kunchanapalli Pavan Kalyan IV EEE Paper Presented WON 2nd Prize in ISTE TECHNICAL EVENT on 04/09/2021 Organized by ISTE CHAPTER, Narasaraopeta Engineering College, Narasaraopet.
- T. Nikhitha Reddy IV EEE Paper Presented WON 3rd
 Prize in ISTE TECHNICAL EVENT on 04/09/2021
 Organized by ISTE CHAPTER, Narasaraopeta
 Engineering College, Narasaraopet



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VOLUME-5, ISSUE-2 PLACEMENT:

21 Students are placed in different MNCs in Campus Placement Drive in College with and average Package of 4.5LPA.

TRAINING PROGRAMMES ORGANIZED

- CRT- Training Programme for IInd B.Tech-EEE from 12-07-2021 to 31-07-2021 Organized by /Resource Person Bytexl Team
- TCS Training Programme for IVth B.Tech-EEE from 05-08-2021 to11-08-2021 Organized by /Resource Person Bytexl Team
- CRT-Training Programme for III^{Ird} B.Tech-EEE from 22-09-2021 to 22-10-2021 Organized by /Resource Person Bytexl Team
- TCS Mock Interviews for IVnd B.Tech-EEE from 30-09-2021 Organized by /Resource Person Bytexl Team.
- Hexaware Training for IVth B.Tech-EEE from 30-09-2021 to 02-10-2021 Organized by /Resource Person Bytexl Team
- CRT- Training Programme for IVth B.Tech-EEE from 25-10-2021 to 30-10-2021 Organized by /Resource Person Bytexl Team.
- HCL HR Mock Interviews for IVth B.Tech-EEE from 30-11-2021 Organized by /Resource Person Dr.Ananda Oliveti.
- Renewable Energy System Master class for IIIrd B.Tech-EEE from 17-10-2021To 16-11-2021Organized by /Resource Person APSSDC_PANTECH e-Learning.

MOOC BY STUDENTS:-

 47 Students are completed MOOC course on DC Microgrid & control Systems

INDUSTRIAL VISITS:-

 IV EEE Students visited Hydro Power Plant- Srisailam on 21-10-2021 III EEE-A & B Students Visited 765/400 kV Substation Power Grid Corporation of India.Ltd. Annavaram Village,Rompicharla Md on 02-12-2021 & 03-12-2021



Alumni Voice

NEC has played a substantial role in my academic career and overall life. I got an opportunity to pursue my Electrical & Electronics Engineering in NEC and it helped me achieve my best by providing a great competitive environment with well-qualified, friendly and supportive teachers, students and staffs. From my best friends to my best memories and excellent academic career, everything is indebted to NEC. As a student, a teacher and alumni of NEC, I would like to thank the entire NEC family for providing such a wonderful educational platform for students from different corners of India.



M.Harika Software Engg. TCS



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VOLUME-5, ISSUE-2 Student's Voice

I started my journey in this college as a Electrical & Electronics engineering student. I joined this college with lots of confusions in mind, but as the days passed I felt my decision in selecting this college was the best thing i did. I found the best people of my life which made many memories, taught many lessons, to realize the comparison good and between bad. Our HOD and teachers guided us, supported us, in spite of all the mischief we did and they stood with us for each and every step, decision we took in leading right us in way. There are many co-curricular activities, events, fest etc. Every year we have fest "JUBALITION" and sports which was a platform to prove our talents.



P.John Asish 19475A0202 IV Year