

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

(An UGC Autonomous Institution)

Affiliated to JNTUA, Ananthapuramu & Approved by AICTE, New Delhi

Post Box No: 14, Kadiri Road

Angallu (Village), Madanapalle-517325



Department of Electrical and Electronics Engineering



CURRENTS

Vol. 1 Issue. 1

Newsletter

Jan-Dec 2020



About us

The Department of Electrical and Electronics Engineering has been playing a vital role in producing professionals of highest calibre ever since it was established in 1998. The department runs one under-graduate programme and one post-graduate programme (M.Tech. - Electrical Power Systems) to cater to the ever challenging needs of technical excellence in all areas of Electrical Engineering such as Power systems, Control Systems & Power Electronics. The department conducts regular seminars, guest lectures, workshops and technical symposiums on latest technologies.

The Department has obtained UGC-Autonomous Status in the year 2014 and have been running programmes (B. Tech. & M. Tech.) successfully. The College Academic Council and Board of Studies of the department strive to provide quality education with the most advanced curriculum to make the students industry ready and excel in the contemporary business world.

The B. Tech. Programme under Department of Electrical and Electronics Engineering was accredited by the National Board of Accreditation (NBA) of All India Council for Technical Education (AICTE).

Editorial Board & Review Committee



Mr. P. Balamurali
Krishna
(Assistant Professor)



Dr. Rajendra Prasad
Narne
(Associate Professor)



Dr. A V Pavan Kumar
(Associate Professor
& Head)

Highlights of the Current Edition

- Events & Programs
- Workshops/ Trainings Attended
- Faculty publications
- Faculty Achievements
- Placement updates
- Student Publications

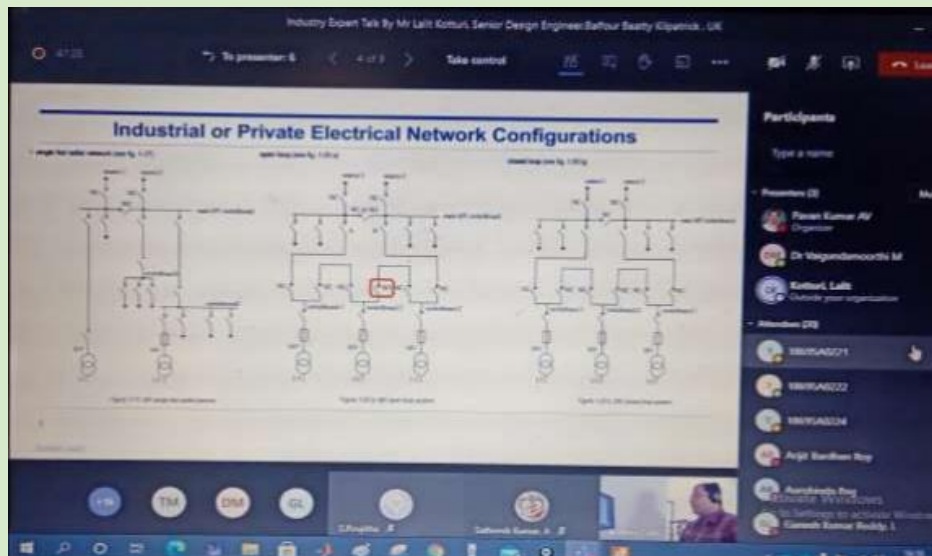
Events and Programs

Guest Lecture by Alumni



Mr. Jakkir Hussain, an Alumni of MITS serving as a Delivery Manager in HCL, Bengaluru delivered a guest lecture on IT TRENDS on 28th of December 2020.

Industry Expert Talk



Mr. Lalit Kotturi, Senior Design Engineer, at Balfour Beatty Kilpatrick, Motherwell, Scotland, UK an industrial expert delivered a Talk on “Electrical Power System Design” on 30th December 2020

Workshops/ Trainings

- ❖ Dr. Rajendra Prasad Narne attended a workshop on “Introduction To PLECS Tool for Power Electronics Applications” organized by VRSEC Vijayawada from 2nd July 2020 to 6th July 2020.
- ❖ Dr. Rajendra Prasad Narne attended a workshop on “Electric Power Grid Modernisation: Trends, Challenges and Opportunities” organized by The National Institute of Engineering, Mysuru from 20th July 2020 to 24th July 2020.
- ❖ Mr. N. Sridhar attended a workshop on “Roadmap for Startup” for ISTE Student Chapter on 12th December 2020
- ❖ Dr. Rajendra Prasad Narne attended a FDP on “Power Electronic Applications on Renewable Energy Systems and Energy Storage Systems” organized by The National Institute of Engineering, Mysuru from 6th July 2020 to 10th July 2020.
- ❖ Dr. M. Chakkarapani attended a FDP on “Recent Research Trends in Electrical Engineering” organized by Gautham Budha University, Greater Noida from 14th July 2020 to 18th July 2020
- ❖ Dr. M. Chakkarapani attended a FDP on “Real Time Aspects of Power System Scenario” organized by Mahatma Gandhi Institute of Technology, Hyderabad from 6th July 2020 to 10th July 2020
- ❖ Dr. M. Vijay attended a FDP on “Current Research Trends in Power Systems and Power Electronics” organized by Vignan’s Nirula Institute of Technology and Science for Women from 20th July 2020 to 25th July 2020
- ❖ Dr. M. Vijay attended a FDP on “Microgrid Opportunity: Renewable Energy Resources and Buildings” organized by Dayalbagh Educational Institute, Dayalbagh, Agra from 16th July 2020 to 20th July 2020
- ❖ Dr. Soumya Ranjan Mahapatro attended a FDP on “Outcome Based Education” organized by Raj University, Ahmedabad from 22nd July 2020 to 27th July 2020

- ❖ Dr. Aurobinda Bag attended a FDP on “Design, Costing and Establishment of Green Energy System” organized by B.I.T Institute of Technology, Hindupur from 31st July 2020 to 3rd August 2020
- ❖ Dr. Parth Sarathi Panigrahy attended a FDP on “Design, Costing and Establishment of Green Energy System” organized by B.I.T Institute of Technology, Hindupur from 31st July 2020 to 3rd August 2020
- ❖ Dr. Parth Sarathi Panigrahy attended a FDP on “Solar Photovoltaic systems: Fundamentals and Challenges” from 20th July 2020 to 24th July 2020 organized at MITS, Madanapalle
- ❖ Mr. Sridhar N attended a FDP on “Solar Photovoltaic systems: Fundamentals and Challenges” from 20th July 2020 to 24th July 2020 organized at MITS, Madanapalle
- ❖ Mr. S. Bharath Kumar attended a FDP on “Solar Photovoltaic systems: Fundamentals and Challenges” from 20th July 2020 to 24th July 2020 organized at MITS, Madanapalle
- ❖ Mr. N. Shyamsundar attended a FDP on “Solar Photovoltaic systems: Fundamentals and Challenges” from 20th July 2020 to 24th July 2020 organized at MITS, Madanapalle
- ❖ Mr. K.M. Venkatachalam attended a FDP on “Solar Photovoltaic systems: Fundamentals and Challenges” from 5th July 2020 to 10th July 2020 organized at MITS, Madanapalle
- ❖ Mr. P. Balamurali Krishna attended a FDP on “Modern Trends of Research in Electrical Engineering-Its Impact on Society and Future Aspects” from 5th July 2020 to 10th July 2020 organized at Narula Institute of Technology.
- ❖ Dr. Rajendra Prasad Narne attended a Webinar on “Integration Of Renewable Energy Systems in Microgrid” organized by PVPSEC, Vijayawada on 1st July 2020.
- ❖ Dr. Rajendra Prasad Narne attended a Webinar on “Research Potentials in Electric Vehicles” organized by SRMIST, Ramapuram on 27th July 2020.
- ❖ Dr. Rajendra Prasad Narne attended a Webinar on “Age Of Spatial Computing, Xr 101” organized by VIT Chennai on 18th July 2020.

- ❖ Dr. Hira Singh Sachdev attended a Webinar on “Sensor Technology In IOT” organized by Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore on 6th July 2020.
- ❖ Dr. Hira Singh Sachdev attended a Webinar on “Integration of Renewable Energy Systems in Microgrid” organized by PVSPEC, Vijayawada on 1st July 2020.
- ❖ Dr. Hira Singh Sachdev attended a Webinar on “Professional Behavior” organized by Francis Xavier Engineering College, Tirunelveli on 14th July 2020.
- ❖ Dr. Hira Singh Sachdev attended a Webinar on “Electrical Maintenance In Heavy Manufacturing Industries” organized by Mahatma Gandhi Institute of Technology, Hyderabad on 17th July 2020.
- ❖ Dr. Hira Singh Sachdev attended a Webinar on “Hands-On Working With E-Tap. Modules: Draw Sld, Load Flow and Fault Current Study” organized by Mahatma Gandhi Institute of Technology, Hyderabad on 26th July 2020.
- ❖ Dr. Hira Singh Sachdev attended a Webinar on “IOT Based Solutions: Industry 4.0 For LV Distribution System” organized by SSN College of Engineering, Chennai on 27th July 2020.
- ❖ Dr. Hira Singh Sachdev attended a Webinar on “Recent Trends in Power Management Strategies for Optimal Operation of Distributed Energy Resources in Microgrids” organized by Mahatma Gandhi Institute of Technology, Hyderabad on 28th July 2020.
- ❖ Dr. Hira Singh Sachdev attended a Webinar on “Power System Scenario” organized by Mahatma Gandhi Institute of Technology, Hyderabad on 29th July 2020.
- ❖ Dr. Hira Singh Sachdev attended a Webinar on “Consumer Protection and Advocacy During Covid-19 Pandemic” organized by MITS, Madanapalle on 6th July 2020.
- ❖ Dr. M. Vijay attended a webinar on “Research Methodology: Structure of Original Research Articles and Insights” organized by Sree Vishnu Engineering College for Women on 24th July 2020

- ❖ Dr. Soumya Ranjan Mahapatro attended a webinar on “Robotics-Connecting Engineering Minds” organized by IIT Delhi on 29th July 2020
- ❖ Mr. Sridhar. N attended a webinar on “Advanced Waste Water Treatment” organized by MITS, Madanapalle on 28th July 2020.
- ❖ Mr. N. Shyamsundar attended a webinar on “Advanced Waste Water Treatment” organized by MITS, Madanapalle on 28th July 2020.
- ❖ Mr. Sateesh Devanga Yerra attended a webinar on “Impact of Covid-19 On the Development of Rural Economy - Challenges and Opportunities” organized by JNTU Ananthapuramu on 27th July 2020.
- ❖ Dr. K. Arul Kumar underwent a short term training on “Big-data Analytics and Cyber Security in Smart Grid Monitoring and Control” organized by Knowledge Institute of Technology, Salem, Tamilnadu from 23rd November 2020 to 28th November 2020.
- ❖ Mr. Sridhar. N underwent a short term training on “Novel Design & Control Strategies and Innovative Technical Practices in LV/HV Modern Switchgear” organized by Saranathan college of Engineering, Tiruchirapalli, Tamil Nadu from 3rd August 2020 to 8th August 2020.
- ❖ Mr. Sridhar. N underwent a short term training on “Role of Artificial Intelligence in Engineering Applications” organized by AICTE from 23rd November 2020 to 28th November 2020.
- ❖ Mr. Sridhar. N underwent a short term training on “Developing Pedagogy for Effective Implementation of Outcome based Education in Engineering Institutes” organized by AICTE from 14th December 2020 to 19th December 2020.
- ❖ Mr. N. Shyamsundar underwent a training on “Recent Trends in EV Technologies” organized by Eswari Engineering College, Chennai, Tamilnadu from 23rd September 2020 to 29th September 2020.
- ❖ Mr. P. Balamurali Krishna underwent a training on “LABVIEW” organized by KIIT-Technology Enabling Centre from 06th October 2020 to 08th October 2020.

Faculty Publications

S.No	Faculty Name	Co-Author	Paper/Book title	Publisher
1.	Dr. M. Vaigundamoorthi	R. Ramesh, V. Vasan Prabhu, K. Arul Kumar	MPPT oscillations minimization in PV system by controlling non-linear dynamics in SEPIC DC-DC converter	International Journal of Electrical and Computer Engineering (IJECE), Vol. 10, No. 6,
2.	Dr. Arijit Bardhan Roy	Apurba Baral, Gourab Das, Arijit Bardhan Roy, Arindam Kole, Nillohit Mukherjee, Sukanta Bose	Stacked Back Reflector Architecture for Advanced Optical Management in State-of-the-Art Single-Junction μ -Si:H Solar Cells	IEEE, Journal of Photovoltaic, 2020 (SCI)
3.	Dr. Parth Sarathi Panigrahy	Santra, D., & Chattopadhyay, P.	Decent fault classification of VFD fed induction motor using random forest algorithm.	Artificial intelligence for engineering design, analysis and manufacturing, 1-13. (Scopus)
4.	Dr. Parth Sarathi Panigrahy	Paramita Chattopadhyay	Tri-axial vibration based collective feature analysis for decent fault classification of VFD fed induction motor	Measurement, Volume 168, 2021, 108460, ISSN 0263-2241 (SCI)
5.	Venkatachalam KM	V. Saravanan	Performance evaluation and load demand management of grid connected hybrid wind-solar-battery system	International Journal of Applied Power Engineering (IJAPE), Vol. 9, No. 3, December 2020,
6.	Venkatachalam KM	V. Saravanan	Grid integration of PMSG based wind energy conversion with battery storage system	International Journal of Applied Power Engineering (IJAPE), Vol 10, No 2: June 2021.
7.	Venkatachalam KM	V. Saravanan, M. Sabitha, V. Bindu & M. Arumugam	Single Switch Z Source/Quasi Z Source DC-DC Converters	International Journal of Applied Power Engineering (IJAPE), Vol 10, No 2: June 2021.
8.	Dr. M. Vijay	Tharehalli mata G, & Krishna H	Performance analysis of MR damper based semi-active suspension system using optimally tuned controllers	Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering. March 2021 (Scopus)
9.	Dr. M. Chakkarapani	Pradeep Kumar, Boggarapu; Nitheesh, Rajendran; Saravana Ilango, Ganesan; Nagamani, Chilakapati	Estimation of PV module degradation through extraction of I-V curve at inverter pre-startup condition	IET Renewable Power Generation, 2020, 14, (17), p. 3479-3486, IET Digital Library (SCI)
10.	Dr. Arijit Bardhan Roy	Vinay Kumar, K. & Saha, M	Light management studies by using different surface texturing for thin c-Si solar cells.	Appl. Phys. A 127, 119 (2021) (Scopus)
11.	Dr. Saran Satsangi	S, Kaur, S, Khanna, R	Substation demand reduction by CVR enabled intelligent PV inverter control functions in distribution systems	Int Trans Electr Energy Syst. 2021; 31:e12724 (Scopus)

12.	Dr. Pratap Ranjan Mohanty	Nishant Patnaik, Anup Kumar Panda	DEC fuel cell-based universal power compensator for dual PCC system	Int Trans Electr Energ Syst. 2021; 31:e12805 (Scopus)
13.	Dr. A. V. Pavan Kumar	Karthik A., Manohar Reddy T.M., Amarnath A., Reddy B.S.	Roof Top Agriculture with Rainwater Harvesting and Smart Irrigation System	Advances in Clean Energy Technologies. Springer Proceedings in Energy. Springer, Singapore. (Book Chapter)
14.	Dr. Chakkarapani M	M. A. Asha Rani, Chilakapati Nagamani and Saravana Ilango Ganesan	An Improved Angular Stator Flux Frequency Computation Method for Enhanced MPPT Operation of DFIG under Unbalanced Grid Voltage	IEEE INDICON 2020, Dec 11-13, 2020.
15.	Dr. Saran Satsangi	S. Arora, R. Khanna, S. Kaur	Substation Energy Analysis by Combined Approach of CVR in a Distribution Network with Smart PV System	2020 IEEE First International Conference on Smart Technologies for Power, Energy and Control (STPEC), Nagpur, India. 2020. pp. 1-5
16.	Dr. Saran Satsangi	S. Arora, S. Kaur and R. Khanna	Evaluation of Substation Demand by Combined Operation of CVR with PV Inverter in EPRI Test Circuit	2021 International Conference on Advances in Electrical, Computing, Communication and Sustainable Technolo-

Faculty Achievements

- ❖ Dr. Sudarshan Swain, Assistant Professor, Dept. of EEE, is one of the toppers in top 2% topper list of NPTEL online certification course on “Introduction to research”.
- ❖ Mr. N. Shyamsundar received the certificate of appreciation from NPTEL for being the top performing mentor for the course “Introduction to Research” with 85% of his candidates qualifying the course.
- ❖ Dr. K. Arul Kumar, Sr. Asst. Professor, Dept. of EEE, Certified as ELITE in 8 weeks NPTEL FDP online certification for the course “Soft Skill Development”.
- ❖ Mr. N. Sridhar, Asst. Professor, Dept. of EEE, Certified as ELITE in 8 weeks NPTEL FDP online certification for the course “Developing Soft Skills and Personality”.
- ❖ Dr. Aurobindo Bag, Sr. Asst. Professor, Dept. of EEE, Certified as ELITE in 4 weeks NPTEL FDP online certification for the course “Stress Management”.
- ❖ Dr. Arijit Bardhan Roy successfully completed a course on “Introduction to Ethical Hacking” provided by Great Learning Academy.

Placement Statistics

Year Wise Eligible and Placed Students

Sl. No.	Academic year	Total number of students	Eligible Students	Number of Offers
1	2019-20	177	152	131
2	2018-19	142	142	98
3	2017-18	124	127	105
4	2016-17	70	71	50
5	2015-16	64	59	50
6	2014-15	69	63	48

Year Wise Particulars of the Package

Sl. No.	Academic year	Highest Salary	Median Salary	Mean Salary	Lowest Salary
1	2019-20	450000	350000	307737	180000
2	2018-19	450000	338000	293816	250500
3	2017-18	400572	250000	319146	120000
4	2016-17	315000	275000	257683	200000
5	2015-16	350000	300000	273995	120000
6	2014-15	320000	190000	215625	190000

Student Publications

S.No	Faculty Name	Co-Author	Paper/Book title	Publisher	DOI
1.	Vinay Kumar, K. & Saha, M	Dr. Arijit Bardhan Roy	Light management studies by using different surface texturing for thin c-Si solar cells.	Appl. Phys. A 127, 119 (2021) (Scopus)	https://doi.org/10.1007/s00339-020-04208-8
2.	Karthik A., Manohar Reddy T.M., Amarnath A., Reddy B.S.	Dr. A. V. Pavan Kumar	Roof Top Agriculture with Rainwater Harvesting and Smart Irrigation System	Advances in Clean Energy Technologies. Springer Proceedings in Energy. Springer, Singapore. (Book Chapter)	https://doi.org/10.1007/978-981-16-0235-1_37