

The official newsletter of Department of Electrical and Electronics Engineering Maharaja Agrasen Institute of Technology



VISION

To produce technically competent human resource for electrical and electronics industry with high moral and ethical values.

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EEE department always enjoyed the immense pleasure to find alumni of this department, getting placed in government jobs and almost all private and multinational companies. The follow-up of the university curriculum, blending core electrical subjects like machines, control and power systems with those of electronics based communication, VLSI design and microcontrollers have helped enriching the broad knowledge based with cutting edge technology to foster self development and confidence to do good & prove one's own worth. The inherent skills of our students are being well nurtured by highly qualified faculty and hard working staff in achieving goals & objectives of the Department. We support the endeavour and wish them success to rise to the pinnacle of glory.

Editorial Team

Chief-Editor: Editor: Dr. Rajveer Mittal Ms. Poonam Juneja Student coordinators: Anant Kumar Devansh Jain Radhika Srivastav Taneeshka Srivastava

STUDENT UPDATES



Faculty Awards

Faculty name	Awards and Recognition	Year
PROF RAJVEER MITTAL	APPRECIATION CERTIFICATE FOR PUBLISHING RESEARCH PAPER IN 2018 – 19	2020
PROF SATVIR DESWAL	APPRECIATION CERTIFICATE FOR PUBLISHING RESEARCH PAPER IN 2018 – 19	2020
DR MONIKA GUPTA	LONG SERVICE AWARD FOR 15 YEARS OF COMMENDABLE SERVICE IN MAHARAJA AGRASEN INSTITUTE OF TECHNOLOGY	2020
DR NEELU NAGPAL	APPRECIATION CERTIFICATE FOR PUBLISHING RESEARCH PAPER IN 2018 – 19	2020
MS POONAM JUNEJA	MENTORED A STUDENT PROJECT THAT WON 5TH POSITION & CASH PRIZE(RS.10,000) COMPETITION ALL OVER INDIA ANVESHANA, DELHI-2020	2020

Research Publications by Faculty

1.	DR MONIKA GUPTA	ENSEMBLE LEARNING FOR FACIAL EXPRESSION RECOGNITION	FUSION: PRACTICE AND APPLICATIONS (FPA) VOL. 2, NO. 2, PP. 31-41	JULY 2020	HTTP://DOI.ORG/10.5281/ZENODO.3944651
2.	MR SUNIL KUMAR PANDEY	FREQUENCY ADAPTIVE COMPLEX COEFFICIENT FILTER BASED CONTROL FOR GRID INTEGRATED PV SYSTEM	IET GENERATION TRANSMISSION & DISTRIBUTION 14(3)	JUNE 2020	10.1049/IET-GTD.2019.1820
3.	MS SHASHIBALA AGGARWAL	PROPAGATION OF NEURONAL SIGNAL UNDER PHYSIOLOGICAL STRESS	INTERNATIONAL CONFERENCE ON COMPUTATIONAL INTELLIGENCE & COMMUNICATION TECHNOLOGIES, SONEPAT, INDIA	29 JUNE 2020	ISBN: 978-93-90274-55-0
4.	MR SUNIL KUMAR PANDEY	HYBRID DSC WITH COMPENSATION CAPABILITY BASED CONTROL FOR GRID INTEGRATED SPV SYSTEM	IEEE 9TH POWER INDIA INTERNATIONAL CONFERENCE (PIICON), SONEPAT INDIA	28 FEB1 MARCH 2020	10.1109/PIICON49524.2020.9113069
5.	MS POONAM JUNEJA	FUZZY PETRI NET MODEL OF PHASOR MEASUREMENT UNIT	INTERNATIONAL CONFERENCE ON SIGNAL PROCESSING AND INTEGRATED NETWORKS (SPIN)	27-28 FEB. 2020	10.1109/SPIN48934.2020.9070847
			240		
6.	DR MONIKA GUPTA	COMPARATIVE ANALYSIS OF BAGGING AND BOOSTING ALGORITHMS FOR SENTIMENT ANALYSIS	INTERNATIONAL CONFERENCE ON SMART SUSTAINABLE INTELLIGENT COMPUTING AND COMMUNICATION UNDER ICITETM 2020 IN DELHI	FEB 4-6, 2020	DOI: 10.1016/J.PROCS.2020.06.025
7.	DR MONIKA GUPTA	FACIAL RECOGNITION USING DEEP LEARNING. SPRINGER BOOK SERIES - LECTURE NOTES IN ELECTRICAL	SPRINGER BOOK SERIES - LECTURE NOTES IN ELECTRICAL ENGINEERING (LNEE)	JANUARY 2020	10.1007/978-981-15-0372-6_30

ENGINEERING

<u>Understanding Power System Simulation Concepts Through</u> <u>Case Studies</u>

A five day event titlied "Understanding power system simulation concepts through case studies" was condu -cted at MAIT by the EEE department in the online mode(following the safety protocol due to covid-19). It was presented by IEEE PES-IAS chapter Delhi section and PES India Chapters Council. The event was conducted from June 22, 2020 to June 26, 2020 and structured under the graceful guidance of Neelu Nagpal ma'am from EEE department, MAIT. This program was descripted to help individuals learn about Power system simulations using MATLAB



software. Power system simulation involves modeling power generation equipment, planning the integration of power plants onto the electric grid, and performing generator control system parameter estimation. Critical power system simulation and optimization tasks include: Simulating performance against grid code and ensuring production goals are met, Automating control system parameter estimation to meet regulatory requirements, Performing EMT simulation and harmonic analysis to identify and mitigate power quality issues. MATLAB combines a desktop environment tuned for iterative analysis and design processes with a programming language that expresses matrix and array mathematics directly. It includes the Live Editor for creating scripts that combine code, output, and formatted text in an executable notebook. It helped individuals learn about latest technologies and provided them with opportunities.

<u>Latest Technological Advancements</u> Smart Grid

The Smart Grid represents an unprecedented opportunity to move the energy industry into a new era of reliability, availa--bility, and efficiency that will contribute to our economic and environmental health. During the transition period, it will be critical to carry out testing, technology improvements, consumer education, development of standards and regulations, and information sharing between projects to ensure that the benefits we envision from the Smart Grid become a reality. The benefits associated with the Smart Grid include: More efficient trans--mission of electricity, Quicker restoration of electricity after



power disturbances, Reduced operations and management costs for utilities, and ultimately lower power costs for consumers, Reduced peak demand, which will also help lower electricity rates, Increased integration of large-scale renewable energy systems, Better integration of customer-owner power generation systems, including renewable energy systems, Improved security

Today, an electricity disruption such as a blackout can have a domino effect—a series of failures that can affect banking, communications, traffic, and security. This is a particular threat in the winter, when home-owners can be left without heat. A smarter grid will add resiliency to our electric power System and make it better prepared to address emergencies such as severe storms, earthquakes, large solar flares, and terrorist attacks.

Factopedia

- » Physics was recognized as a discipline in the 19th century.
- » Time goes faster at the top of the building than at the bottom. According to Einstein's theory of Relativity, the farther an object is from the Earth's surface, the faster time passes.
- » The electrons in your fingertips repel the like-charged electrons in your phone's screen, causing the electrical circuit at that point to open and a programmed sensor to perform the action coded in the phone's software.
- » EEG and smartphone results are both due to ionic current.

Pun stop

- ØA physicist woke up feeling ill. "My head hertz," he said.
- A physics student failed an exam so badly his test paper froze solid. He got an absolute zero.
- A physics professor always made his class sit on the edge of a cliff while they studied. He said that was where they had most potential.
- A student wanted to know what happened before the Big Bang. The teacher couldn't explain, because there was no time.

Latest Technologies and their Applications in Electrical Engineering

and Future Energy



A one week event was organized on "Latest Technologies and their Applications in Electrical Engineering and Future Energy "was conducted by MAIT by EEE department in online mode. It was organized from 16th-20th August, 2020. It was done under guidance of Poonam Juneja ma'am. This program was descripted to help individuals learn about Latest Technologies and their applications in Electrical Engineering. The application of electrical engineering is endless. Scientists have developed many applications of electrical. Electricity, the main supply of power

is one such good application. Conversion of sources of energy is nothing however electricity.100 years before individuals light-weighting with oil lamps for light. Once the assembly of electricity many a lot of applications has been evolved like invention of bulb. Now-a-days electricity is employed not just for power provide however additionally for preparation, heating, travelling etc.





Our beloved faculty of EEE department

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