

# Newsletter

DEPARTMENT OF ELECTRICAL ENGINEERING

OCT-DEC 2020 | Volume 5, Number 4

VISIT US: <http://mitsgwalior.in/department.php?id=ee#NL>

## Vision

*“ To Prepare Professionally  
Competent Electrical Engineers for  
Global Industrial requirements and  
societal needs”*



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## NEWSLETTER TEAM MEMBER

**Advisor** – Dr. S. Wadhvani  
**faculty Member**- Prof. Aprajita  
Kumari, Prof. Shailendra pratap  
Prof Bhavna rathore, Prof Vishal  
Chaudhary ,Dr Vikram,  
Prof. Shweta Kumari,  
**Student member**- Mr. Abhinav  
Singh Tomar , B.Tech Final Year,  
EED, Mr. Ritik Gupta, B.Tech Third  
Year, EED

## MISSION

- *Impart state-of-the-art technical education at UG, PG and Ph.D. levels through good academic support & facilities. (Academic Development)*
- *Keep pace with latest technological developments in the domain. (R&D Activities)*
- *Effective interactions with industries, academia and other stakeholders. (Industrial & Societal needs)*
- *Provide training on soft skills, managerial skills and professional ethics for overall development of students and society in an ethical manner. (Human Potential Development)*

## Programme Educational Objectives (PEOs)

### PEO-I

*Graduates of the program will have successful technical and professional career*

### PEO-II

*Graduates of the program will continue to learn and adapt in a world of constantly evolving technology*

### PEO-III

*Graduates of the program will be able to apply, analyze, design and develop products and solutions for real life Electrical Engineering problems.*

### PEO-IV

*Graduates of the program will be able to manage projects catering to current societal and industrial needs in an ethical manner as a members/leaders of multidisciplinary teams*

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## *FACULTY OUTREACHED*

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- **Dr. Shishir Dixit** Online Faculty Development Program AICTE Training And Learning (ATAL) Academy Online FDP on "Internet of Things (IoT)" at Institute of Engineering and Technology Devi Ahilya University Indore FROM 13<sup>TH</sup> TO 17<sup>TH</sup> October 2020.
- **Dr. Shishir Dixit** attended online International Summit on Quality Indices in Higher Education organised by Delhi. Technological University, Delhi from 6<sup>th</sup> to 7<sup>th</sup> NOV 2002
- **Dr. Shishir Dixit,** attended AICTE Training And Learning (ATAL) Academy Online FDP on "Energy Engineering" at National Institute of Technology Agarta from 23<sup>rd</sup> to 27<sup>th</sup> NOV 2020.
- **Prof. Saurabh Kr Rajput,** attended FDP on Recent Trends in Energy and Power System (RTEPS) 19<sup>th</sup> to 23<sup>rd</sup> OCT 2020
- **Dr. Vikram** attended IIST Online FDP on Control and Automation from
- **Prof. Shailendra Pratap Singh** attended IIST Online FDP on Control and Automation from 15<sup>th</sup> -18<sup>th</sup> DEC 2020.
- **Prof. Shailendra Pratap Singh** attended AICTE ATAL Sponsored FDP on Application of AI in Engineering from 14<sup>th</sup> -18<sup>th</sup> DEC 2020
- **Prof Aprajita Kumari** attended TEQIP III Short-Term Course on "Deep Dive in Deep Vision" FROM 7<sup>TH</sup> TO 9<sup>TH</sup> DEC 2020.

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## *STUDENT PARTICIPATION IN SPORTS/EXTRA-CURRICULAR/CULTURAL OUTSIDE THE INSTITUTE*

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- Rashmi Kumari has participated in Online National Workshop on Internet of Things (IoT) and Data Analytics at MITS Gwalior from 23<sup>rd</sup> oct- 24<sup>th</sup> oct 2020.
- Nitin Goyal has completed NPTEL Courses on Semiconductor devices and circuits and Selection of nanomaterials for energy harvesting and storage application, Technologies for clean and renewable energy production.
- AJAY SHARMA has completed NPTEL Course - Semiconductor devices and circuit.

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## PUBLICATIONS

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- *Book Chapter 1: Singh A.P., Singhal A., Athaya A., **Rajput S.K., Srivastava L., Sharma V. (2021) Energy Audit of Hybrid (Grid, Solar Rooftop Photovoltaic System and Diesel Generator) Electric Power Supply System: A Case Study of Commercial Building.*** In: Gupta O.H., Sood V.K. (eds) *Recent Advances in Power Systems. Lecture Notes in Electrical Engineering*, vol 699. Springer, Singapore. [http://doi-org-443.webvpn.fjmu.edu.cn/10.1007/978-981-15-7994-3\\_27](http://doi-org-443.webvpn.fjmu.edu.cn/10.1007/978-981-15-7994-3_27)
- *PoonamSingh, **ManjareePandit, LaxmiSrivastava**, "Comparison of Traditional and Swarm Intelligence based Techniques for Optimization of Hybrid Renewable Energy System", *Renewable Energy Focus*, doi.org/10.1016/j.ref.2020.06.010, (Available online since 3 July 2020, In Press, Journal Pre-proof) Volume 35, December 2020, Pages 1-9*
- ***Vishal choudhary, Hari Mohan Dubey, Manjaree Pandit, J.C.Bansal**, "Multi-Area Economic Dispatch with Stochastic Wind Power using Salp Swarm Algorithm", *Array* 8 (2020) 100044 (Available online 11 September 2020) doi.org/10.1016/j.array.2020.100044*
- *Nikhil Paliwal, **Laxmi Srivastava, Manjaree Pandit**, "Application of grey wolf optimization algorithm for load frequency control in multi-source single area power system", *Evolutionary Intelligence*, <https://doi.org/10.1007/s12065-020-00530-5>, November 2020*
- *Sunita Shukla, **Manjaree Pandit**, "Multi-objective fuzzy rank based scheduling of utility connected microgrid with high renewable energy using differential evolution with dynamic mutation" accepted for publication on 26th December 2020 in *International Transactions on Electrical Energy Systems (ITEES)* Wiley.*
- *Book Chapter (Accepted): **Rajput S.K., Wadhvani S.**, Singh J. (2021), "Reliability and Energy Efficiency of Ring Frame Machine in Textile Industries: Secure, Smart, and Reliable Network"; *Lect. Notes Electrical Eng.*, Vol. 721, Rajeev Agrawal et al. (Eds): *Advances in Smart Communication and Imaging systems*, 978-981-15-9937-8, 488434\_1\_En, (Chapter 61) *International Conference Paper: Rajput S.K., Dheer D.K., Wadhvani S., "Improving Energy Efficiency of Ring Frame Motor of Textile Industry", December 2020 ICSISCET, Madhav Institute of Technology & Science, Gwalior, MP. India.**

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- **Book Chapter 1:** Singh A.P., Singhal A., Athaya A., Rajput S.K., Srivastava L., Sharma V. (2021) Energy Audit of Hybrid (Grid, Solar Rooftop Photovoltaic System and Diesel Generator) Electric Power Supply System: A Case Study of Commercial Building. In: Gupta O.H., Sood V.K. (eds) Recent Advances in Power Systems. Lecture Notes in Electrical Engineering, vol 699. Springer, Singapore. [http://doi-org-443.webvpn.fjmu.edu.cn/10.1007/978-981-15-7994-3\\_27](http://doi-org-443.webvpn.fjmu.edu.cn/10.1007/978-981-15-7994-3_27)
- **Book Chapter 2:** Babul A.K., Rajput S.K., Singh H., Yadaw R.C. (2021) Energy and Economic Analysis of Grid-Type Roof-Top Photovoltaic (GRPV) System. In: Singh A.K., Tripathy M. (eds) Control Applications in Modern Power System. Lecture Notes in Electrical Engineering, vol 710. Springer, Singapore. [http://doi-org-443.webvpn.fjmu.edu.cn/10.1007/978-981-15-8815-0\\_34](http://doi-org-443.webvpn.fjmu.edu.cn/10.1007/978-981-15-8815-0_34)
- **Book Chapter3 (Accepted):** Rajput S.K., Wadhvani S., Singh J. (2021), "Reliability and Energy Efficiency of Ring Frame Machine in Textile Industries: Secure, Smart, and Reliable Network" Lect. Notes Electrical Eng., Vol. 721, Rajeev Agrawal et al. (Eds): Advances in Smart Communication and Imaging systems, 978-981-15-9937-8, 488434\_1\_En, (Chapter 61)
- **International Conference Paper:** Rajput S.K., Dheer D.K., Wadhvani S., "Improving Energy Efficiency of Ring Frame Motor of Textile Industry", December 2020 ICSISCET, Madhav Institute of Technology & Science, Gwalior, MP. India.
- Kingshuk Roy, **Laxmi Srivastava, Shishir Dixit**, "MVO Based Approach for Optimal DG and Capacitor Allocation" in Second International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology (ICSISCET- 2020)" December 18 - 19, 2020.
- Vinay Kumar, **Shishir Dixit**, Modified DC-DC Converter for integration of Energy sources in Second International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology (ICSISCET- 2020)" December 18 - 19, 2020.

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## *DEPARTMENT ACTIVITIES*

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- Electrical engineering department has organized Two Days Online Training/Workshop on **PSCAD software** in association with Nayak Power Systems Private Limited Duration: 25-26 September 2020
- Electrical engineering department has organized **National Level Online Quiz Competition** 05 Sep 2020

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## *FACULTY AS RESOURCE PERSON*

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- **Dr.Shishir Dixit** delivered an expert talk on TPC and Reviewer in 2nd International Conference on Enhanced Research and Industrial Application 2020 8 October 2020 - Yogyakarta, Indonesia International Conference on Enhanced Research and Industrial Application
- **Dr.Shishir Dixit** delivered an expert talk on TPC and Session Chair in 12th IEEE International Conference (CICN 2020)