

**Our Inspiration** 



Smt. Pratibhatai Patil Former President of India & Dr. D. R. Shekhawat Former Chairman

#### VISION

To emerge as the leading Electrical Engineering department for inclusive development of students.

MISSION

To provide studentcentered conducive environment for preparing knowledgeable, competent and value added electrical engineers.



Shri. Raosaheb Shekhawat Chairman & Managing Trustee

Department of Electrical Engineering

### SHOCKWAVES (Newsletter) Volume-21 Issue-01

Activities Conducted

## Add-On Course on "Recent Trends in Electrical Engineering"

#### 12th to 16th Sep. 2023 (30 Hours Duration)

The purpose of Add-On Course to provide career oriented course and bridge the gap curriculum. The aim of the program is to disseminate knowledge recent trends in electrical engineering for sustainable development.

This course is intended for graduate students but it is also open to senior undergraduate students. There is no official pre-requisite at the time of enrolment. However, basic knowledge of power systems, basic knowledge of computer will be helpful.

#### **Objective of Program**

To provide recent trends in Distributed Generation, Power Quality issues, recent trends & challenges in power system protection for Smart Grid and application of Auto-CAD, AI and Cloud Computing & Big Data in power systems. Course Content

Energy scenario in India, issues of power quality, Application of AI and Auto CAD and Cloud Computing & Big Data in electrical Engineering, Introduction to Smart Grid Standards for Smart Grid System Elements and Technologies of Smart Grid System, Distributed Generation Resources, Smart Grid Protection

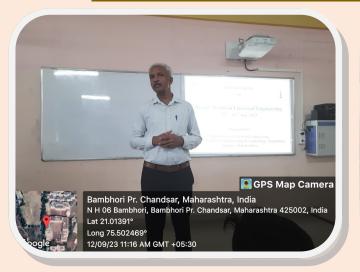
### **Outcome of Program**

After successful completion of this course the student will be able to:

- 1. Understand the recent trends in electrical Engineering..
- 2. Understand concept and issue of power quality.
- 3. Understand concept of power system protection and challenges of power system protection in smart grid.
- 4. Understand the application of AI , Auto-CAD and Cloud Computing & Big Data in electrical Engineering
- 5. Understand the technical and economic benefits of power factor improvement.
- 6. Hands on practices in operation and maintenance of On Grid PV Solar plant.

# **Activities Conducted**

## Add-On Course on "Recent Trends in Electrical Engineering"













## **PROGRAM OUTCOMES(POs)**

1	<b>Engineering knowledge</b> : Apply the knowledge of mathematics, science, engineering fundamen- tals, and an engineering specialization to the solution of complex engineering problems			
2	<b>Problem analysis:</b> Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.			
3	<b>Design/development of solutions:</b> Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.			
4	<b>Conduct investigations of complex problems:</b> Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.			
5	<b>Modern tool usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.			
6	<b>The engineer and society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.			
7	<b>Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.			
8	<b>Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.			
9	Function effectively as an individual, and as a member or leader in diverse teams, and in multi- disciplinary settings.			
10	<b>Communication:</b> Communicate effectively on complex engineering activities with the engineer- ing community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear in- structions.			
11	<b>Project management and finance:</b> Demonstrate knowledge and understanding of the engineer- ing and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.			
12	<b>Life-long learning:</b> Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.			
PROGRAM SPECIFIC OUTCOMES(PSOs)				
1	Apply principles of engineering, electronics and computer science; basic science, mathematics (including differential equations, discrete mathematics and linear algebra) and laboratory skills for building, testing, operation and maintenance of electrical systems.			
2	Model, analyse, design, and realize physical systems, components or processes related to electri- cal engineering systems.			
3	Be prepared to work professionally in power systems engineering, control systems engineering and software industries.			

**MoU Signed by Department** 

A Memorandum of Understanding (MoU) is a formal agreement between two or more parties. Companies and organizations can use MoUs to establish official partnerships.

### **Purpose of MoU**

The purpose of Department MoU with Industry can minimize the gap between learning and carrier opportunity. The industry has many new technology requirements, so **Industry-Academic Interaction** plays a vital role in the **Placements and Carrier growth for the students.** We have signed MoU with the following Academic and industry Institutes. The MoU is intended to recognize the general basis for a cooperative and a collaborative working relationship between the two parties. The purpose of MoU is to have mutual intentions to jointly work on projects required for industries and research needs, with learned faculty of good industrial experience and promising students, jointly agree to exchange their expertise for mutual benefit and growth, on the areas specified below:

- Industrial Visits
- In-plant Training & special Technical Training to make the students industry-ready
- Guest Lectures
- Mini Projects and Main Project Work
- Research & Development
- Problem Solving
- Studies & Survey
- Placements
- Internships
- Establishing Advanced Labs

S.N.	Name of Institute/Industry	Date of Signed MoU	Duration of MoU
1	<b>7 P arallels Tectrno-Consultants Pvt. Ltd.</b> Llnit1.6, Lotus Star, Plot No. D-5 Cross Road N o.20, MIDC, Andheri tE), Mumbai-40 0 09 3 Maharashtra	13 <sup>th</sup> Sep , 2021	Two Years
2	Automation Services & Prolific Systems & Technologies Pvt. Ltd. PLC & SCADA Automation Training, 36, Preet Chamber, Mumbai-Pune highway, Wakadewadi, Shivajinag ar, Pune -411003, Mah arashtra	13 <sup>th</sup> Sep , 2021	Two Years
3	<b>7 P arallels Tectrno-Consultants Pvt. Ltd.</b> Llnit1.6, Lotus Star, Plot No. D-5 Cross Road N o.20, MIDC, Andheri tE), Mumbai-40 0 09 3 Maharashtra	10 <sup>th</sup> Jan, 2022	Two Years

# **Guest Lecture by Alumni**

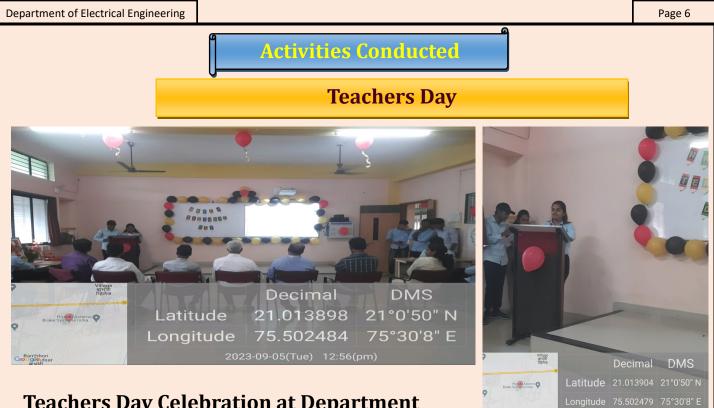


## **Topic:** "Electrical Engineer: Present Trends and Requirements in Industries "

### $28^{th}$ Aug 2023

The purpose of Guest Lecture to provide career oriented course and bridge the gap curriculum. The aim of the program is to disseminate knowledge about Industrial requirement and its future scope. Economical impact of industrial production growth by new immerging trends.

**Mr. Shailesh G Pandey**, alumni of our college of 2011 batch and presently working as *Assistant Manager in Bridgestone Stone India Ltd*, Chakan, Pune , has delivered key note address to Electrical Engineering students on 28/08/2023. He highlighted need, necessity and requirements of the industry from core field Electrical Engineering. He also talked about demands of Electric Drives, BLDC motors and construction and maintenance. On behalf of department we congratulated him for opting career in core field and wished him best wishes for his bright future.

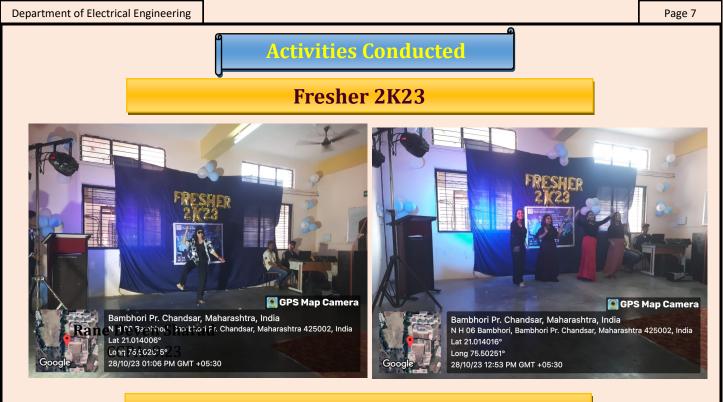


## **Teachers Day Celebration at Department**

Teachers' Day 2023: Teacher's Day in India was first observed in the year 1962. The day commemorated the birth anniversary of Dr. Sarvepalli Radhakrishnan. He was the first Vice-President and second President of independent India.

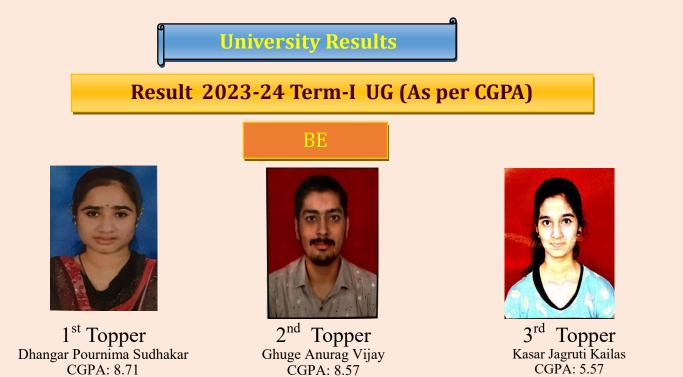
There is no doubt that being a teacher is a noble profession that deserves an equal amount of love and respect as any other profession. Teachers' Day in India is celebrated every year on September 5 to mark the birth anniversary of Dr. Sarvepalli Radhakrishnan. He was a former President of India, scholar, philosopher and Bharat Ratna recipient. On Teachers' Day 2023, students all over the country pay respect and tribute to their teachers. In some schools, special programs are also organised to celebrate Teachers' Day on September 5. It is a reminder of the role that teachers play in nation-building by guiding and educating the brightest minds of our country.





# Achievement

- Mr. Kunal Lakhichand Jiri (Student of Final Year ) and Mr. M. Mujtahid Ansari (Faculty Member) had completed NPTEL Certificate 12 Week Course Smart Grid: Basics to Advanced Technology, funded by the MoE, Govt. of India.
- Mr. M. Mujtahid Ansari (Faculty Member) delivered guest lecture on "Energy Conservation : A Case Study" at Mauli College of Engineering and Technology, Shegaon (MS) on 7th Sep. 2023.



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## **University Results**



1<sup>st</sup> Topper Sahil Hanuman Ghadge CGPA: 8.71





2<sup>nd</sup> Topper Sharma Gaurav Rajkumar CGPA: 8.29

SE



3<sup>rd</sup> Topper Marathe Ajit Ravindra CGPA: 7.90

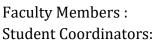


1<sup>st</sup> Topper Jaiswal Aashika Rajesh CGPA: 8.90



2<sup>nd</sup> Topper Kumbhar Jayshree Kailas CGPA: 8.20

**Newsletter Committee** 



Mr. V. S. Pawar (Editor) Ms. Jaiswal Aashika (SE)



3<sup>rd</sup> Topper Patil Rushikesh Vishal CGPA: 8.15

Mr. M M Khan(Designer) Ms. Ghuge Anurag Vijay (BE)

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**Dr. G. K. Patnaik** Principal



Dr. S. B. Pawar Vice-Principal



**Mr. V. S. Pawar** Head, Electrical Engg. Dept.