

Newsletter
Session: 2022-23

VISION OF THE INSTITUTE

To emerge as Learning Center of Excellence in the National Ethos in domains of Science, Technology and Management.

MISSION OF THE INSTITUTE

- [M1] To strive for rearing standard and stature of the students by practicing high standards of professional ethics, transparency and accountability.
- [M2] To provide facilities and services to meet the challenges of Industry and Society.
- [M3] To facilitate socially responsive research, innovation and entrepreneurship.
- [M4] To ascertain holistic development of the students and staff members by inculcating knowledge and profession as work practices.

VISION OF THE DEPARTMENT

To emerge as a learning hub and centre of excellence in the domain of Electrical Engineering.

MISSION OF THE DEPARTMENT

- [M1] To disseminate knowledge replete with quality education in the field of Electrical Engineering in meticulous and methodical manner.
- [M2] To provide platform to address societal issues as well as challenges faced by industries.
- [M3] To develop research culture and inculcate innovative and entrepreneurial skills.
- [M4] To ensure overall development of students and staff by instilling knowledge and professional ethics as part of lifelong learning.

ABOUT TGPCET

Tulsiramji Gaikwad-Patil College of Engineering and Technology (TGPCET) was established in the year 2007 by Vidarbha Bahu-uddeshiyaShikshan Sanstha (VBSS), a registered society. It is a self financed Private Engineering College, which is affiliated to RashtrasantTukadoji Maharaj Nagpur University (RTMNU) Nagpur and is approved by All India Council for Technical Education, New Delhi. Also college is approved by Directorate of Technical Education (DTE), Mumbai, Maharashtra State. The Institute is Accredited with A+ (3.32 CGPA) by NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC). An Autonomous Institute affiliated to RTM Nagpur University, Nagpur.



ABOUT DEPARTMENT

The Department Of Electrical Engineering provides in depth education & prepares its students for all the possible future career & developments in technology. Department has a fine blend of experienced as well as young dynamic enthusiastic personalities as faculty for providing quality education at both B.E.(Electrical) and M.Tech.(Integrated Power System). It aims to promote research and teaching activity based on advanced and novel teaching methods. The specious infrastructure, well equipped laboratories, meritorious students and academically qualified and enthusiastic faculty being the salient features of the Department.

MESSAGE FROM HOD DESK



**Dr. Prashant Thakre,
HoD,EE**

Welcome to the Department of Electrical Engineering of Tulsiramji Gaikwad-Patil College of Engineering and Technology Nagpur. We started our journey in the year of 2011. Over the last 12 years, we have grown our Expertise & competence in the core Electrical Engineering curriculum. The primary focus of our curriculum is to impart technical know-how to students, promote their problem-solving skills & innovation of new technologies. The students are encouraged to undertake various research projects. We have state-of-the-art research facilities in the constitution with industry to support our academic programs. Our department has a distinguished record in both teaching & research. Faculty members have excellent academic credentials & are highly regarded. Our department looks forward to contributing to solving the technological challenges of the society with active participation from all sections of the society. The goal of this newsletter is to keep you updated with developments in Electrical Engineering Department of TGPCET. This department is continuously undergoing transformation. New initiatives have been launched related to academics, student affairs, and research and extracurricular activities. The students & faculty members of the department are sincerely participating in various activities organized at institute or at other places. It is elevating to see the sound performance of students. I offer best wishes for future activities. At last, I thank to the editors of SPARK for their sincere efforts & I offer my best wishes to the readers of this newsletter.

Editorial Board



**Dr. Prashant Thakre, HoD, EE
chief Editor**

Editorial Committee



**Prof. Ashvini Admane
Faculty Coordinator**



**Ms. Yashika Gondane
Student Co-ordinator**



**Ms. Sunandita Fule
Student Co-ordinator**



**Mr. Gunwanta Waghmare
Students Co-ordinator**



**Mr. Harshal Ghavghave
Students Co-ordinator**

TULSIRAMJI GAIKWAD-PATIL COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRICAL ENGINEERING

INDUSTRIAL VISIT ORGANIZED BY THE DEPARTMENT

SONALI POWER EQUIPMENT PRIVATE LTD, MIDC HINGNA, NAGPUR



Industrial Visit to Sonali Power Equipment Private Ltd, MIDC Hingna, Nagpur, under the ISTE and IE(I), Students Chapter was organized on 25th February 2023. Students got practical understanding of DC Machines and Transformers. The main focus of this industrial visit is to fill the bridge between technical concepts taught in curriculum and industry applied concepts. Various technical concepts were discussed with the students which are applied in the field of electrical engineering.

INDUSTRIAL VISIT AT RCOEM-TATA CIIT, RCOEM, NAGPUR

Industrial Visit to RCOEM-TATA CIIT, RCOEM, Nagpur was organized on 9th March 2023 for 3rd year. Students understand the process of making it in the form of design, development and fabrication of innovative products. Students enable the competency development in modern engineering tools which is necessary for product design, development, manufacturing and provide the students to gain insights to Industry 4.0 and other disruptive technologies.



INDUSTRIAL VISIT AT MAHINDRA & MAHINDRA, NAGPUR



Industrial Visit to MAHINDRA & MAHINDRA, Nagpur, was organized on 1st July 2023 for 3rd year students. They have got an opportunity to interact with the “On Field Engineers” and different sections of Mahindra plant and they got the platform of industrial exposure with help of which they get aware about the latest tools and technology used in the industry.

GUEST LECTURES ORGANIZED IN THE DEPARTMENT

GUEST LECTURE ON THERMAL POWER PLANT

Guest Lecture has been organised on the topic “Thermal Power Plant” on 5th July 2023. In this interaction the basics to advancements of Thermal power Plant with its various steps and equipment was discussed. Students got an idea about new techniques used in modern power plants, problems associated with it and its remedies. Scope of internship in power plants was also discussed during the lecture.



WORKSHOP ORGANIZED IN THE DEPARTMENT

TWO DAYS WORKSHOP ON “ADVANCES IN SOLAR PHOTO VOLTAIC TECHNOLOGIES”

Two Days Workshop on “Advances in Solar Photo Voltaic Technologies” has successfully organized on 7th and 8th July 2023. The Guest speakers for the sessions were Dr. Prashant V. Thakre, HOD, EE Department, Mr. Sameer Pathak, Suntronics renewables pvt. Ltd. Nagpur, Mr. Vipin Chaudhari, Unique Techno Solution, Jalgaon and Mr. Ashish Paturkar, Add. Executive Engg. KTPS Nagpur. They delivered the sessions on basics of solar photo voltaic technologies and put up lime light on future aspects of solar technology. They guided the students about overall working and different sections of solar system.

In this student have developed concept of solar system and understood the methodology of erection, commissioning, power generation through solar photovoltaic system and the applications of solar systems. They also visited the solar site and developed practical concept.



DEPARTMENTAL ACTIVITIES

PARENTS TEACHER MEET

Parents Teacher Meet" for B.Tech. 4th semester students was arranged on 12th July 2023 at Electrical Engineering Department-seminar Hall to discuss about Department activities, student progress and performance. Total 20 parents attended this meeting.



RESERCH AND DEVELOPMENT PUBLICATIONS

SR.NO.	NAME OF FACULTY	PUBLICATION	Indexing
1	Prof. Radharaman Shaha	BMOTSM: design of a hybrid bioinspired model to determine optimal turbine sizing for capacity maximization in environment-and- economy aware Deployments. VOL. 42, NO. 1, 1–16, 2023 ISSN: 14786451	SCI
		GRMWBO: design of a general-purpose repowering model for wind farms via bioinspired optimization. https://doi.org/10.1007/s43538-023-00150-4 ISSN: 03700046	(Scopus Indexed)

		<p>Improvement of transient stability in a system using a unified power flow controller by artificial neural network. Vol 3, Issue 7, ISSN 2582-7421.</p>	Peer Reviewed
2	Dr. Pratik Ghutke	<p>Matlab modelling and simulation of reconfigurable solar converter: a single-stage power conversion pv-battery system. Vol. 12 Issue 4, p30-36. 7p.</p>	Peer Reviewed
		<p>Development of Vertical Axis Wind Turbine for application of Highways. Vol. 4, Issue 05, e-ISSN: 2582-5208.</p>	Peer Reviewed
		<p>Review on Modelling and Simulation of Hybrid Electric Vehicle Based On MATLAB/Simulink. Vol, 07 Issue: 06 June – 2023, ISSN: 2582-3930</p>	Peer Reviewed
		<p>Modelling and Simulation of Hybrid Electric Vehicle Based On MATLAB/Simulink. Vol. 11, Issue VI, June 2023, ISSN: 2321-9653.</p>	Peer Reviewed
3	Prof. Vaishali Malekar	<p>Transmission line Three-Phase Fault Analysis Using Matlab/Simulink. Vol. 10, Issue VII, ISSN: 2321-9653</p>	Peer Reviewed
4	Prof. Sneha Tibude	<p>Comparative analysis Different Topologies of Grid-tied Transformer less Inverters for Photovoltaic System. Vol. 11, issue 7, e-ISSN: 2278 –8875</p>	Peer Reviewed

PLACEMENTS



Kalyani Hinge, Kalyani Patle and Tejas Nagmote from VIII Sem, Electrical Engineering have been placed in SUNTRONIC RENEWABLES PVT LTD.



Kalyani Hinge (EE)



Kalyani Patle (EE)



Tejas Nagmote (EE)



Congratulations

Tushar H Kumbhalkar
Dhiraj G Bisen
Aditya S Patre
Hiresh Y Patle
Vaibhav V Thakare
Hina A Ghode
Karishma Naitam
Janvi L Rangari
Akansha Thool
Dipak M Nimje
Suraj V Pisalkar
Saurabh S Yerkhede
Prachi Raut
Rohini R Yenpreddiwar
Poonam N Rathod
Payal Thote
Nilima N Gawalkar
Mrunali A Chavan
Prajakta Harle
Aachal Kurutkar
Parmeshwar
Raj A Maratkar
Sayli Fulzede
Rashmi V Lokhande
Akash Shankarpale
Sheetal Ramteke
Kajal D Kharole
Kapil Sahu
Shreya A Udan
Divya P Pawar
Chakradhar G Rajegore
Vyankatesh S Bhavar
Savita P Bhagatkar

Nandkishor Katre
Shubham S Balpande
Sahil V Vaidhya
Prashant D Kendre
Moin Salam Shaikh
Tejas K Nagmote
Pranju S Mohitkar
Rajnandini Mahato
Harshad T Jambhulkar
Balaji P Jadhav
Shilpa M Chakate
Sumit D Hajare
Dipak H Bhardwaj
Tushar K Dhobale
Aditya Patil
Devanshi Patel
Liladher D Barde
Rajat D Shrirame
Sanjaydeep R Chahade
Jay V Dhakate
Sajeshwari S Bhagat
Manisha S Pardhi
Shivam N Mishra
Samir Shaikh
Ashish Kadu
Nikhil H Telrandhe
Sarang Milmile
Gaurav D Bhange
Pravin Chandewar
Jaspal S Rathod
Anup S Tambe
Om Mange
Rajesh P Anparti

Manish Dolas
Pramod S Bhure
Madhav G Kosulkar
Bhushan Y Bambhole
Sushant H Harinkhede
Bankesh Sarkar
Saurabh Kawale
Pradeep G Harinkhede
Nikhil R Urkude
Binay M Chakravorty
Mahesh B Sawant
Indrajeet S Verma
Pratik R Jarile
Nitin L Dhote
Vibhu M Rahangdale
Rohit G Patle
Vishal E Devhate
Akash Dhuldhule
Rohit Tembhurne
Nikita P Bhalme
Pranali K Barapatre
Avinash Khotale
Abhishek J Gajbhiye
Komal H Meshram
Shreyas Pohankar
Bhagyashree H Kore
Rameshwar B Maske
Kalyani V Patle
Achal Sonewane
Rutik Bhagat
Prathamesh Bobade
Kanchan V Rathod
Aboli M Babhare

ACADEMIC TOPPERS

IV -SEM TOPPERS

Rank	Name of Student	Roll No	Marks Obtained out of 800	SGPA
I	Prajwal Sanjay Sapat	403879	776	10
II	Sachine HarichandraJambhekar	403887	753	9.54
III	Pritam Shankar Kondapratihar	403882	742	9.46

VI -SEM TOPPERS

Rank	Name of Student	Roll No	Marks Obtained out of 700	SGPA
I	Amit NilkanthaDhakate	388831	664	9.83
II	Jagannath Prankrishna Banik	388844	660	9.69
III	Chaitanya Yuvraj Neware	388835	659	9.66

VII -SEM TOPPERS

Rank	Name of Student	Roll No	Marks Obtained out of 700	SGPA
I	Amit NilkanthaDhakate	388831	664	9.83
II	Jagannath Prankrishna Banik	388844	660	9.69
III	Chaitanya Yuvraj Neware	388835	659	9.66

III -SEM AUTONOMOUS TOPPERS

Rank	Name of Student	Marks Obtained out of 800	Percentage (%)
I	Lina JageshwarUkey	564	70.50
II	Adarsh RamluNallalwar	535	66.87
III	Ruchita Ganesh Bante	530	66.25

ACHIEVEMENTS



NPTEL MOTIVATED LEARNER

CERTIFICATE OF APPRECIATION TO

RADHARAMAN SHAHA

for being recognized as NPTEL MOTIVATED LEARNER
JAN-APR 2023

Devendra Jalihal
Prof. Devendra Jalihal
Chairman
Centre for Continuing Education, IITM

Prof. Andrew Thangaraj
Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

NPTEL MOTIVATED LEARNER
Candidate has to appear in atleast 8 exams in Jul 2021 - Jan 2023, passed in 75% of courses appeared, atleast one exam in each of the 4 semesters

CERTIFICATE OF APPRECIATION TO

CHETAN ASHOKRAO JAMBHULKAR

for being recognized as NPTEL MOTIVATED LEARNER
JAN-APR 2023

Devendra Jalihal
Prof. Devendra Jalihal
Chairman
Centre for Continuing Education, IITM

Prof. Andrew Thangaraj
Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

NPTEL MOTIVATED LEARNER
Candidate has to appear in atleast 8 exams in Jul 2021 - Jan 2023, passed in 75% of courses appeared, atleast one exam in each of the 4 semesters

DOMAIN CERTIFICATE

This is to certify that

RADHARAMAN SHAHA
has successfully completed all the requirements for SWAYAM-NPTEL Domain Certification in
Faculty Domain - Advanced
(Faculty)
The courses were completed in the period April 2023

Devendra Jalihal
Prof. Devendra Jalihal
Chairman
Centre for Continuing Education, IITM

Prof. Andrew Thangaraj
Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

Roll No: NPTELD523200000191
To validate and check score: <https://npTEL.ac.in/>

Course Type	Course Name	Duration	Offering Institute	Course Start Date	Weeks (Out of 16)	CR Code
core	Effective Engineering Teaching in Practice	8 weeks	IIT Madras	Jan-Feb 2022	08	EE6001
core	Ethics in Engineering Practice	8 weeks	IIT Kharagpur	Aug-Oct 2022	08	EE6002
core	Introduction to Professional Science, Communication	8 weeks	IIT Kharagpur	Jan-Mar 2023	08	EE6003
core	Teaching And Learning in Engineering (TAL)	8 weeks	IIT Bangalore	Jan-Mar 2023	08	EE6004
core	Web Acceleration and Teaching Learning in Engineering (WALE)	12 weeks	IIT Bangalore	Jan-Apr 2023	12	EE6005
elective	Training of Trainers	12 weeks	IIT Bombay	Jul-Oct 2022	12	EE6006
elective	Education for Sustainable Development	12 weeks	IIT Kharagpur	Jan-Apr 2023	08	EE6007
Total Weeks						64

Criteria for certification in **Faculty Domain - Advanced Domain**:
The candidate should complete the prescribed 8 core courses and 2 elective courses:
1. Scoring a minimum of 75% marks in each course and should pass the course test.
2. A range of 60 courses in the domain should be 60.
3. 50% of the duration of the courses should be 40 weeks.

DOMAIN CERTIFICATE

This is to certify that

CHETAN ASHOKRAO JAMBHULKAR
has successfully completed all the requirements for SWAYAM-NPTEL Domain Certification in
Faculty Domain - Advanced
(Faculty)
The courses were completed in the period April 2023

Devendra Jalihal
Prof. Devendra Jalihal
Chairman
Centre for Continuing Education, IITM

Prof. Andrew Thangaraj
Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

Roll No: NPTELD523200000178
To validate and check score: <https://npTEL.ac.in/>

Course Type	Course Name	Duration	Offering Institute	Course Start Date	Weeks (Out of 16)	CR Code
core	Effective Engineering Teaching in Practice	8 weeks	IIT Madras	Jan-Feb 2022	08	EE6001
core	Ethics in Engineering Practice	8 weeks	IIT Kharagpur	Aug-Oct 2022	08	EE6002
core	Introduction to Professional Science, Communication	8 weeks	IIT Kharagpur	Jan-Mar 2023	08	EE6003
core	Teaching And Learning in Engineering (TAL)	8 weeks	IIT Bangalore	Jan-Mar 2023	08	EE6004
core	Web Acceleration and Teaching Learning in Engineering (WALE)	12 weeks	IIT Bangalore	Jan-Apr 2023	12	EE6005
elective	Training of Trainers	12 weeks	IIT Bombay	Jul-Oct 2022	12	EE6006
elective	Education for Sustainable Development	12 weeks	IIT Kharagpur	Jan-Apr 2023	08	EE6007
Total Weeks						64

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3. 50% of the duration of the courses should be 40 weeks.

