

## Annual Report of Electrical Engineering Department for the Academic Year 2022-23

It gives me immense pleasure to put before you the Annual Report which includes various activities performed and the achievements during the academic year 2022-23 of our department.



### 1. ACADEMIC PERFORMANCE:

The students have shown excellent results in university examination. Result of S.Y, T.Y and B.E classes of 2022-23-II examination are as follows:

#### a) Class Ranks

##### BE (Electrical)

Class Rank	Name of Student	%
1	Prerna Umakant Dhayfule	85
2	Susmita Baburao Tonape	84
3	Rushikesh Ravindra Annaldas	82
4	Pawan Purushottam Kairamkonda	81
5	Vinayak Basavraj Katte	81

##### TE (Electrical)

Class Rank	Name of Student	%
1	Bhushetti Umesh Rajshekhar	83.7
2	Asma Taher Sayyed	83.1
3	Zendekar Prasad Keshav	80.7
4	Dhale Shekhar Dhanraj	80.6
5	Ingalggi Gauri Nagnath	78.8

##### SE (Electrical)

Class Rank	Name of Student	%
1	Shaikh Aasam Naushad	79
2	Mittha Parimala Narasinh	79
3	Aishwarya Vishweshwar Umbre	78
4	Palampalle Santoshi Mahadev	77
5	Choudhari Zarin Shakeel	77

#### c) Class wise Results:

S.E. (Electrical) – 52.85 %

T.E. (Electrical) – 55.40 %

B.E. (Electrical) – 97.37 %

#### d) Best outgoing student:- Mr. SARANG ANIL BHISE

##### STUDENT PLACEMENTS: 2022-23

Sr. No.	Name of Company	No. of Students Placed
1	TCS	02
2	Hexaware	01
3	Four Front	03
4	Hidden Brain	01
5	Jaro Education	01
6	Tata Motor	01
7	Lumi Light	04
8	Flash Education	06
9	OEN India Pvt. Lim.	07
10	Kinetic Green	04
11	Allied Digital	02
12	ZF Steering	01
Total		33

## 2. R & D Activities

### a. FACULTY PUBLICATIONS:

Prof. Irfan Mujawar published a paper titled “On Field Performance Analysis of Shunt Compensation of an Agricultural Feeder using Power Analyzer” in International Journal of Future Generation Communication and Networking Vol. 14, No. 1, (2021), pp. 3909 – 3918.

### b. Webinar on RGSTC Scheme :-

The institute organized an online awareness program on 19th July-22 on Assistant for Science and Technology Applications Through University System. Through this university scheme, Rajiv Gandhi Science and Technology Commission, Government of Maharashtra provide Rs 5 lakh funding to UG, PG and research projects of the students. The key note address was delivered by Dr KV Kale Hon Vice Chancellor DBATU University. The scheme details were presented by Dr NG Shah, Member secretary RGSTC Government of Maharashtra and Dr Shivaji Rao Jadhav scheme coordinator DBATU.

## 3. FACULTY ACHIEVEMENT:

- ☐ · Dr. V. S. Shirwal & Prof. V. B. Bhosale RGSTC proposal accepted and received re grant of 2.5 lakhs for “ Intelligent Hybrid Vehicle”
- ☐ · Prof. Irfan I. Mujawar is appointed as Associate Editor (technical program committee) for IPMU Journal of Energy Harvesting and Storage. This journal is open access, free-of-charge and peer-reviewed.
- ☐ · Prof. V. B. Bhosale was awarded as best teacher of the department for academic year 2022-23 on the occasion of Teachers day on 5th September 2023.
- ☐ Prof. Viraj B. Bhosale is appointed as Primary Evaluator in Toyathon 2022 organized by

Ministry of Education, Ministry of MSME, Govt. of India.

## 4. INDUSTRY - INSTITUTE INTERACTION:

- a) Testing and consultancy Activity:  
Electrical Engg. Department has the state-of-art laboratories. The department has conducted Energy Audit of Laxmibai Bhaurao Patil Mahavidyalaya, Solapur and Karmveer Bhaurao Patil Mahavidyalaya, Pandharpur.

### b) Sponsored Projects:

Sr. No.	Project Title	Industry	Stipend	No. of Student
1	Solapur smart City CCTV and surveillance system integrated with command and control centre	Allied Digital & Tata Motors Ltd	-	04
2	Design and development of electromagnetic relay and electromagnetic switches	Forefront Pvt Ltd, Pune	10000	03
03	Quality Control of Electric Vehicle	Kinetic Greens Pvt Ltd, Ahmadnagar	10000	04
04	Design and development SCADA mapping for Solapur City substation	MSEDCL, Solapur		05
05	Relay Manufacturing	OEN India Pvt. Ltd., Pune	10000	06
06	Optimizing operation and maintenance of 10 MW Grid Connected solar PV plant.	Prozeal Engineering Pvt. Ltd, Malumbra, Tuljapur	-	04

07	Design & development of Buck converter	Siemens Ltd, Airoli Navi Mumbai	-	01
08	Integrated Electromotive Wheel Retrofit For Bicycle Electrification	Dessault System		01
09	Full Stack Web Development Using Java	JAVA By Kiran & Coding Ninja Education	-	02
10	Lighting Design for commercial Building	Lumilight solution, Solapur	20000	03
11	Vaccine Management System Using JAVA	Inhouse	-	05
Total				38

**c) Internship/project in industry:**

**All S.Y. & T.Y. students have undergone 15 days of industrial training during winter vacation at various industries. Also many students have completed internship through online platform like udemy, NPTEL, & COURSERA**

**The prominent industries where students pursued internship are as follows**

1. Indian Railway DRM section
2. Kirloskar ferrous industry, solapur
3. MSETCL
4. MSEDCL
5. Payal Pumps, solapur
6. Raj Electricals, osmanabad
7. Sidhanath Sugar mil, solapur

**d) MoU With Industries**

The department of Electrical Engineering has signed MoU with following industries to bridge the gap between industry and academia

1. Exa-Mobility, pune
2. Laxmi Hydraulics Pvt. Ltd. Solapur
3. Texas Industry
4. Spitzed Energy Solutions pune
5. MSEDCL, Solapur

**6. Spartan Technology, Solapur**

e) MoU with industries :-

- i. NKOCET Electrical Dept. with MSEDCL
- ii. MoU between GP Solapur & NKOCET, Sol.

**f) Industrial Visits :-**

On 5th April 2023, a group of 130 second year and third year Electrical Engineering students visited the 10 MW ACG Solar Power Plant located in Malumbra-Tuljapur. The aim of the visit was to gain practical knowledge about the installation, maintenance, and operation of a solar power plant.

**7. SHORT TERM COURSES/ CONFERENCE/ WORKSHOPS ATTENDED/ ORGANIZED BY OUR FACULTY MEMBERS.**

**A) STTP/FDP ATTENDED**

Following faculty members have attended 2 Day FDP on “Energy Conservation & Audit” conducted by GOVERNMENT POLYTECHNIC SOLAPUR, from 14.07.2023 to 15.07.2023.

1. Prof. Irfan I. Mujawar
2. Prof. A. J. Mehta
3. Prof. V.B. Bhosale
4. Prfo. D.D. Pawar
5. Prof. J. B. Patil
6. Prof. A.B. Auti

1) Prof. V. B. Bhosale has completed three days International Faculty Development Program (FDP) on “**ADVANCED TOPICS IN CONTROL SYSTEMS**” organized by Department of Electrical Engineering in Association with IET Nashik Local Network FROM 22<sup>nd</sup> to 24<sup>th</sup> September 2022

2) Prof. V. B. Bhosale & Prof. J. B. Patil has completed Two days ONLINE FDP on “Multiple Attributes Decision Making Methods” organized by Government Polytechnic, Solapur, from 20/07/2023 to 21/07/2023.

3) Following faculty members have completed 12 week FDP on “NBA Accreditation and Teaching and learning in Engineering (NATE)” conducted by IIT Madras.

1. Prof. J. B. Patil
2. Prof. K. B. Tamboli
3. Prof. P. B. Sakhare

4) Following faculty members have completed 8 week FDP on “Accreditation and Outcome Based Learning” conducted by IIT Madras.

1. Dr. N. K. Sharma
2. Prof. J. B. Patil

5) Following faculty members have completed one week PDP on "Advanced Pedagogy" from 29/08/2022 to 03/09/2022 conducted by NITTTR Chennai.

3. Dr. N. K. Sharma
4. Prof. J. B. Patil

6) Prof. J. B. Patil completed the One Week Online Faculty Development Program on "Research and Development in Electrical, Electronics and Communication Engineering", organized by the Department of Electrical Engineering and Electronics & Telecommunication Engg. from 16th to 21th August, 2022.

#### **B) WORKSHOP ATTENDED:**

Two faculty members and two students have participated in the Training Workshop titled Energy for Irrigation: Focus on LT Network Design conducted under Unnat Maharashtra Abhiyan (UMA) sponsored by Directorate of Technical Education (DTE) and Higher and Technical Education Department, Maharashtra and organized by UMA cell, CTARA IIT Bombay and Bapurao Deshmukh College of Engineering, Sevagram, Wardha on 17th and 18th November 2022.

#### **Faculties participated:**

1. Prof. Irfan Mujawar
2. Prof. Viraj Bhosale

#### **Students participated:**

1. Mr. Samarth Swami (TY Electrical)
2. Mr. Vijay Bhimarthi (TY Electrical)

2. A team of faculty members and students have participated and presented the carried work in the follow up Workshop titled Energy for Irrigation: Focus on LT Network Design - II conducted under Unnat Maharashtra Abhiyan (UMA) organized by MIT Aurangabad and conducted by CTARA IIT Bombay on 24th February 2023.

#### **Faculties participated:**

1. Prof. Irfan Mujawar
2. Prof. Viraj Bhosale

#### **Students participated:**

1. Mr. Karan Tatikonda (TY Electrical)
2. Mr. Navin Dornal (TY Electrical)

3. Three days training workshop on PLC and SCADA is conducted for TY Electrical students from 9<sup>th</sup> to 11<sup>th</sup> March 2023 by Sofcon Training, Pune. Total 65 students are enrolled. Workshop was coordinated by: Prof. P. B. Sakhare & Prof. K. B. Tamboli.

#### **8. DEPARTMENT ADVISORY BOARD:**

Electrical Department Advisory Board meeting was conducted on 5<sup>th</sup> May 2023. The purpose of this meeting is to understand how industries working under lockdown COVID-19 situation as well as to discuss the post COVID-19 working in industries taking into consideration the various measures with proper precautions. For this meeting 3 Industry Representative and 2 Alumni were participated as follows:

1. Mr. Suneel Pendse, MD, Onkar Trading, Solapur
2. Mr. Gajanan Bijjargi MD Laxmi Control, Solapur
3. Mr. Sagar Katte MD JDK Enterprises, Solapur
4. Mr. Gujan Tipe, Mechatronics Engineer, Elnfotek, bHyderabad
5. Mr. Ramling Chougule, System Engineer, AVL Electronics, Pune

The meeting underlines the importance of new knowledge areas such as Artificial intelligence, Machine learning is part of future work requirement irrespective of branch of engineering. Also the opportunity for Electrical Engineer in Machine Installation, Programming and maintenance will rise in near future. E-vehicle and facilities for its charging stations will be in huge demand. The key message from the meeting is stay safe and keep Hygiene at work place.

#### **9. NPTEL COURSES:**

Class	Name of the course	No. of Student registered
SE	Non-Conventional Energy Resources	14
	Power System Engineering	20

TE	Advance power electronics & Control	55
	Control Engineering	54
	Industrial Automation And Control	58

#### CO-Curricular courses from students

Name of the course	CLASS & No. of Student completed
<b>1. Coursera Platform</b>	
Electrical Power System	SE-48 TE-17
Python for Everybody	SE-68 TE-17
Wind Energy	SE-05 TE-02
Solar Energy Basics	SE-20
Electrical Industry Operation and Marketing	SE-03
Interpersonal communication for engineering leaders	SE-31
Oral Communication/Communication skills for engineers	SE-14 TE-10
Personality types of work	SE-04
Grammar and punctuation	SE-06
Introduction to soft skills	SE-10
Business English: basics	SE-06
C for everyone	SE-03
Conversation English skill	SE-20
Machine Learning	SE-05
AI for everybody	SE-04
<b>2. Energy Swaraj Foundation Platform (IIT Bombay)</b>	

Learn to design your own solar home system	SE-60 TE-03
<b>3. TATA Steel Platform</b>	
Induction Motor	SE-15 TE-04
Transformer	SE-22
Natural gas	SE-05 TE-02
<b>4. AutoCAD Platform</b>	SE-55
<b>5. TCS ION career Edge/knockdown to Lockdown</b>	SE-22 TE-03

#### 10. CO-CURRICULAR COURSES FOR STUDENTS

The department conducted various Co- Curricular courses for our students as follows.

1. Dept. of Electrical Engg. Organized two weeks workshop on “Basics of Matlab” from 17<sup>th</sup> Sept. 2022 to 26<sup>th</sup> Sept. 2022 for SY Electrical student
2. Dept. Electrical Engg. Organized one week workshop on PLC SCADA and its Application from 6<sup>th</sup> March 2023 to 11<sup>th</sup> March 2023 for TY Electrical student.

#### 11. CONTRIBUTION OF FACULTY MEMBERS IN VARIOUS DEPARTMENT & INSTITUTES ACTIVITIES

Sr. No.	Name of faculty	Portfolio
1	Prof. V B Bhosale	Head of Electrical Engineering Department
		EDP Coordinator (Institute level)
		Solar Coordinator
2	Prof. B Sampathkumar	Expert lecture Coordinator
		R&D Coordinator
		CII Coordinator
		Power Electronics & Drives Lab. In charge
3	Prof. C H Mallareddy	Career Counselling / GATE coordinator
		Departmental C Programming coordinator
		Department VLAB Coordinator
		PLC & SCADA Lab

4	Prof. A. J. Mehta	Incharge
		Magazine Coordinator
		DSE Admission Coordinator
		Maintenance Incharge (Institute Level)
		Dept. Timetable Coordinator
		FE Admission Coordinator
		DBATU Exam Coordinator
		DBATU POE Coordinator
		Electrical Machine I Lab Incharge
		Electrical Machine II Lab Incharge.
5	Prof. P B Sakhare	Class Coordinator (TE)
		Website Coordinator
		ACEE Committee faculty Coordinator
		BEE Lab Incharge
6	Prof. A B Auti	Class Coordinator (BE)
		Departmental NAAC/NBA coordinator
		Computational Lab I Incharge
		Mini Project Coordinator
		BE Project coordinator
		Project Lab Incharge
7	Prof. K B Tamboli	Self-learning module coordinator
		NPTEL/Online Course Coordinator
		Switchgear & Protection Lab Incharge
		Archive Coordinator
		Industry visit coordinator
8	Prof. D. D. Pawar	TNP Coordinator
		Industry connect coordinator
		Industry-Institute Partnership / MoU coordinator
		Alumni Coordinator
		Magazine Coordinator (Technical Section).
		Analog & Digital Electronics Lab Incharge
		DAB Coordinator
9	Prof. J. B. Patil	Class coordinator (SE)
		Departmental NAAC/NBA coordinator
		Academic Monitoring Committee Member
		Industrial training coordinator
		Co-curricular course coordinator
		Computational Lab II Incharge
		Electrical Measurement Lab Incharge

10	Prof. M P Kokare	Control System Lab Incharge
		Parent Teacher Coordinator (PTA)
		Departmental News Letter Coordinator
		Library Coordinator

## 12. AWARDS WON BY STUDENTS IN VARIOUS COMPETITIONS

Sr. No.	Name of student	Class	Competition	Organized by	Pri ze
1	Sumit Badure	TE	Technical Event	Karmyogi Institute	2 <sup>nd</sup>
2	Anjali Gudur	SE	FESTA	SVERI	1 <sup>st</sup>
3	Shekhar Dhale	TE	Technical Event	VVPIET	1 <sup>st</sup>
4	Anjali Gudur	SE	Stand-up Comedy	Solapur Youth Festival	1 <sup>st</sup>
5	Vinit Bhandare	TE	Technical Event	NBN Sinhgad	1 <sup>st</sup>

## 13. AMBITIOUS CANAL OF ELECTRICAL ENGINEERING (ACEE) ACTIVITIES:

### a) ACEE Committee:

Following students were elected as office bearers of Ambitious Canal of Electrical Engineering Students Association (ACEE) for the academic year 2022-23.

Sr no	Name of Students	Post
1	Sarang Bhise	President
2	Karan Tatikonda	Vice-President
3	Ruturaj Kotiwale	Secretary
4	ShrinathDesai(Treasurer)	Vice Secretary
5	Nandini Manepatil(Treasurer)	Assistant Secretary
6	Samarth Rathod	
7	Vaishnavi Lokare(Head)	
8	Moiz Tamboli	
9	Vaishnavi Vadnal	Anchoring
10	Onkar Kshirsagar	
11	Naveen Dornal	
12	Sudhir Patil(Head)	
14	Vijay Bhimrati(Head)	
16	Pratik Hanamgao	
17	Madhuri Udatta	
18	Revati Kumbhar	
19	Gauri Ingalgi	Technical
20	Vaishnavi Jankar	
21	Akash Nagansur	
22	Siddesh Hippargi	

23	Anjali Sonawane(Head)	
24	Asma Sayyed (Head)	
25	Sonali Vhatkar	
26	Pruthviraj Patil	
27	Vinayak Ambalgi	
28	Shivani Andage	Decoration
29	Ashish Joshi	
30	Ankita Khobare(Head)	
31	Vinit Bhandare (Head)	
32	Sumit Badure	
33	Aishwarya Mali	Photo & Gallery
34	Priyanka Kolekar	
35	Ajit Zodmote	

**b) Events Organized By ACEE Committee in A.Y. 2022-23**

Events	Activity
<b>Guru Poornima</b>	Student Speeches
<b>Fresher's Party</b>	Welcome of 2nd Year Students
<b>Teachers Day (5<sup>th</sup> Sept 2022)</b>	Felicitation of Teachers, Drama On importance of Teacher
<b>Engineer's Day (15<sup>th</sup> Sept 2022)</b>	Technical Events- ❖ Poster Presentation ❖ Treasure Hunt ❖ Quiz Competition
<b>Mahatma Gandhi Jayanti (2<sup>nd</sup> Oct 22)</b>	Introduced life and efforts taken by Mahatma Gandhi for freedom of Nation by performing Drama, Speeches and shown documentary.
<b>Marathi Bhasha Pandharwada (5<sup>th</sup> Jan 2023)</b>	Speeches and Poster Presentation
<b>Technovation 2K20 (9<sup>th</sup> March 2023)</b>	Technical Event for Diploma Students & Non-Technical Events for 11 <sup>th</sup> & 12 <sup>th</sup> Students
<b>Cultural Programs</b>	Blue Day Mismatch Day Bollywood Day Twins Day
<b>Inter-Department Sports</b>	Cricket and Volleyball Matches

**d) Expert Lecture Arranged by ACEE for Benefit of Students**

Sr. No.	Topic of expert lecture	Guest	Date
1	Career guidance for civil services examinations.	Miss Ashwini Shivaji Kale from Ashwamedha IAS academy Pune	04-12-2022
2	How to crack the GATE with good rank	Mr. Shankar Wadne (AIR-231, Faculty Ace Engg. Academy,	13-12-2022

		10 years Exp.)	
3	Three Phase Transformer	Mr. Juber Shaikh Assistant Engineer, MSEDCL	21-01-2023
4	High Performance Surface Coatings- Opportunities in Industry and Gaps in Academics	Mr. Sandip Soley, Managing Director, Dazzle Dynacoates Pvt. Ltd.	27-02-2023
5	Career Enhancement & Self-Motivation	Mr. Yajuvendra Mahajan, Motivational speaker	02-03-2023
6	Women Empowerment	Ms. Swati Ankalgikar, Assistant Professor SSWP Solapur	08-03-2023
7	Electrical Drives	Dr. Vimlesh Verma, Assistant Professor, NIT Nagpur	10-04-2023
8	Control System	Dr. Jay Prakash Singh, Assistant Professor, NIT Nagpur	15-04-2023
9	Life Style for Environment	Dr. B. K. Sonage, I/C Principal, NKOCET Solapur	25-05-2023
10	Three Phase Induction Motor	Mr. Juber Shaikh Assistant Engineer, MSEDCL	29-05-2023

**e) Department Upgradation :-**

New 16 kit for Measurement Lab are purchased and installed for student in Electrical Measurement lab for conduction of practical's.

Total cost:- 138709/-

(Prof. V. B. Bhosale)

Head

Department of Electrical Engineering