

DIRECTOR'S DESK



Hon. Achyut Sawantbhonsale
Executive Chairman, SYBES

I am very happy to know that Electrical Department is coming with its another issue of a Newsletter 'Jyotirgamaya' for the academic Year 2022-23. Today, the role of the institute is not only to pursue the academic excellence but also to nurture the holistic development in them. I appreciate the efforts taken by the department for the overall development of students. On our part, we are always trying to provide the best to our students. Definitely our future engineers will shine in all fields. I congratulate the team of Newsletter for taking the efforts and I wish good luck to all.

★★★

Editorial Committee

Editor in Chief

Mr. G. A. Bhosale (Vice Principal)

Co-Ordinator

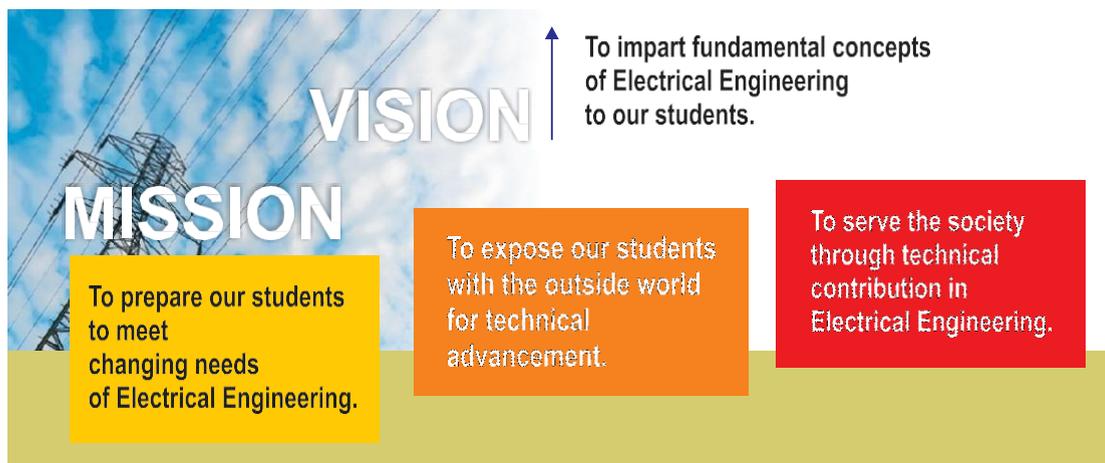
Mrs. Nehal N. Sandye (Lecturer)

Departmental Faculty Member

Mr. S.S.Ghadigaonkar (Lecturer)

Student co-ordinator

Ms.Sayali Giri (TYEE)



VISION ↑ To impart fundamental concepts of Electrical Engineering to our students.

MISSION

- To prepare our students to meet changing needs of Electrical Engineering.
- To expose our students with the outside world for technical advancement.
- To serve the society through technical contribution in Electrical Engineering.

Industrial Visit to Fire Bridage station in MIDC Kudal.



Department of Electrical Engineering organized Industrial Visit for thw SYEE class to the FIRE BRIGADE STATION IN MIDC KUDAL. This visit was arranged under the INDUSTRIAL AND WORKPLACE SAFETY COMPLIANCE".As per K scheme syllabus the information related to various safety equipments, various rescue methods and the application of these equipments and methods in day to day life as well as industry and public places etc. observe the various types of fire extinguisher and their application on different types of fire. Students were learned about classes of fire and how to extinguish these fire .During the visit student gets hands-on experience related to the actual fire incident. Students were mentored and guided by Mr. P.P.Parab Sir along with his supporting staff. Student asked many questions regarding how to tackle different types of fire incident. The entire visit is successfully organized by faculty member Mr. H.A PAWAR sir , Mr. S.S.Ghadigaonkar sir

HOD'S DESK



Mr. H.A. Pawar
HOD,
Electrical Dept.

I am delighted to extend my warmest congratulations to everyone associated with the Electrical Department on the successful publication of the latest edition of the 'Jyotirgamaya' newsletter. The Jyotirgamaya newsletter is an excellent platform for showcasing the outstanding achievements, innovative research, and noteworthy activities of our department's faculty members, students. This year has been a challenging one for all of us. However, the determination, resilience, and hard work displayed by our team have been truly commendable. I would like to take this opportunity to congratulate the editorial team for their outstanding efforts in bringing this newsletter to fruition. Let us continue to work together to achieve our goals and objectives

★★★

Industrial Visit to Motor Winding, Processig Mauli Enterprise in MIDC kudal

Department of Electrical Engineering organized Industrial Visit for TYEE class to the MAULI ENTERPRISE IN MIDC KUDAL, to gain practical knowledge about motor winding processes, electrical component assembly, and industrial operations. The visit was organized to provide students with hands-on exposure to industrial practices and bridge the gap between theoretical knowledge and practical application. Students were mentored and guided plant in-charge Mr. Wargaonkar Sir along with his supporting staff. Student asked many questions regarding selection criterion of winding wire and numbers of turns. The entire visit is successfully organized by faculty member H.O.D Mr. H.A PAWAR sir , Mr. S.S.Ghadigaonkar sir and Ms. T.R.Shenai mam



Electrical department organized Parents-teacher meeting for SY and TY students



Yashwantrao Bhonsale Institute of Technology, Sawantwadi (Polytechnic Wing) organised Parent-Teacher Meet of all departments on 07th March 2025. We organise parents meet every semester to share the progress of each department with the parents and to address the concerns of the parents. For this meet all departments HOD's, all teaching and non teaching staff members & total 629 Parents. Desai* sir informed the parents about the different job opportunities and various TPO. G. A. Bhosale* sir informed the parents about the MSBTE academic calendar for the current semester and the efforts taken by the institute for improving the performance of our students shared with the parents the details of different activities organised by YBIT and campus discipline Event anchoring and Vote of Thanks was done by *Mr. A. G. Prabhu* sir.

"EE Students Shine at SSPM Fest"

Department of Electrical Engineering
Congratulations to TY Electrical Engineering (Diploma wing) students who shines in " *Virtuosic-A National Level Technical Event"

Total 20 Students from TY Electrical Engineering (Diploma wing) participated in "VIRTUOSIC" organized by SSPM college of Engineering , Kankavli. Out of them 15 students hits the success!!!

1 prize Project:Solar

Car Group members:

Tanmay Parab Murlidhar Gawade

Rohit Parab Madhukar Parab

Pranav Gawade

Under the guidance of Mr. H.A. Pawar

Group members:

Atharva Parab Sitaram Padte

Lavoo Shelke

Second Prize

Project: Roof mounted Sea water Distillation Plant

Under the guidance of

Ms. T. R.Shenai

Group members:

Pratik Zarpark sayali giri Harshad

Sawant Yuvraj Rawool

Third Prize

Project: Solar powered street sweeping machine

Under the guidance of Mr. S.N.Nirmalkar

Group members:

Rupali Katale Aryan Parulekar



The Department of Electrical Engineering (Diploma) organized a 3-day short-term training program. The objective of the program was to enhance students' practical understanding of core electrical engineering subjects and align their knowledge with industry-oriented practices. The training program was inaugurated by **Mr. H.A. Pawar**, Head of the Department (Electrical), in the presence of all Electrical Department faculty members. Special participation and support were extended by **Ms. Teja shenai**, who have always encouraged academic excellence and hands-on learning. It not only enhanced students' subject knowledge but also encouraged them to think practically and apply theoretical concepts. The department plans to conduct more such technical programs in the future to continue enriching students' learning experiences. We extend sincere gratitude to **Mr. H.A. Pawar** (H.O.D), and all faculty members of the Electrical Department for their efforts in organizing and delivering this valuable training program. Special thanks to the session

YBIT ORGNIZED PROJECT COMPETITION TECHCELLENCE 2K25 FOR THIRD YEAR STUDENT

_Innovative projects presented by engineering students ,On Saturday, March 29 at the Yashwantrao Bhosale Institute of Technology, the Indian Society for Technical Education (IST) approved State Level Project Competition 'Textile 2K25' was successfully concluded. This competition made engineering students a good platform to present their innovative ideas.

_ Was done by the administrative officer of the institute, Sunita Phatak. Principal Dr. Raman Bane, Deputy Principal Gajanan Bhosale, Computer Department Chief Prashant Kate, Mechanical Department Chief Abhishek Rane, Civil Division Chief Prasad Sawant, Electrical Department Chief Harshal Pawar were present. Students of various polytechnic institutions in the state participated in this. These projects were based on sophisticated technologies like Internet of Things, Artificial Intelligence, Smart System, Robotics and Digital Transformation. The names of the winners are as follows

Electrical Division - Winner: Roof Marted Sea Water Distribution Plant
Pratik Zarapkar, Sally Giri, Yuvraj Raul, Harshad Gavas, Prasad Raul (Bhosle Institute of Technology).

Runners (Division): Solar Car - Tanmay Parab, Muralidhar Gawade, Pranab Gawade, Madhukar Raul, Rohit Parab (Bhosale Institute of Technology)

Hydroponic Agriculture in IOT based containers - Pratik Narkar, Ganpat Narkar, Tejas Nandgaonkar, Chaitanya Nhawelkar, Amit Desai (Bhosle Institute of Technology)

YBIT ORGANIZED A 3 DAY ELECTRICAL TRAINING PROGRAM



Winter 2024 Toppers

Second Year



Namita Morajkar
86.59%



Paras Mestry
85.65%



Ankita Sail
81.18%

Third Year



Pratik Zarapkar
89.70%

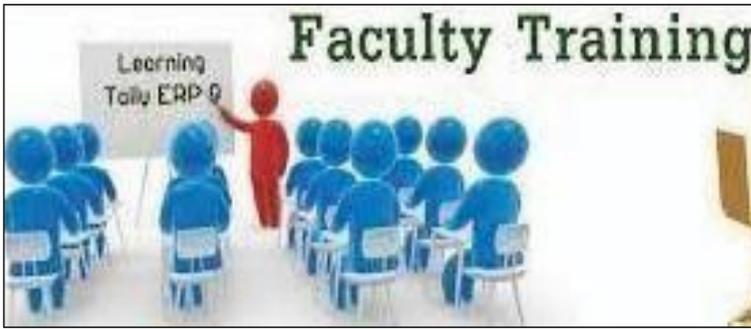


Atharv Parab
87.70%



Sayali Giri
86.80





Faculty Training



Mr. H.A. Pawar, Head of the Electrical Engineering Department, successfully participated in a one week Professional Development Programme ML Insights: A comprehensive session series" organized by Department of Electronics and Telecommunication Engineering, Gharda Institute of Technology in association with The Institute of Electronics and Telecommunication Engineers from 6th January to 10th January 2025.

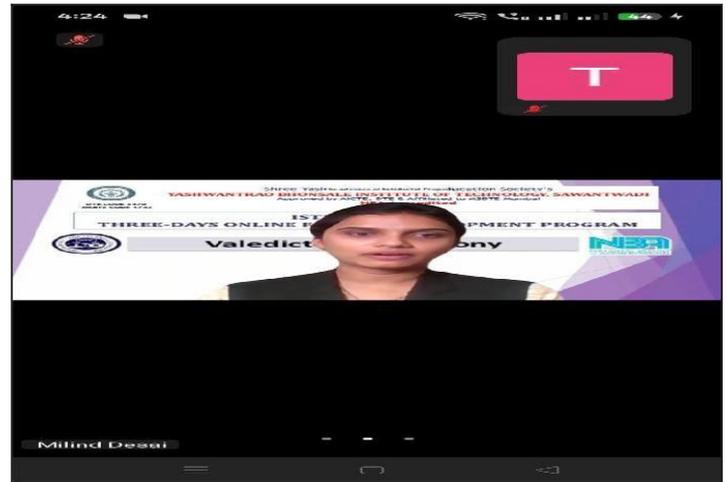


Ms. T.R. Shenai and Mrs. Nisha Malkar, Faculties from the Electrical Engineering Department (Diploma wing) has successfully completed a one week online faculty development program on "Model based development in Electrical Vehicle Designing" organized by Sanjay Bhokare Group of



Institutes in collaboration with IGK servitek India private limited, Pune between 11th April to 17th April 2025

YBIT Successfully Hosts Three-Day ISTE Approved Online FDP



Sawantwadi, March 20, 2025: Yashwantrao Bhosale Institute of Technology (YBIT), Sawantwadi, successfully conducted a Three- Day ISTE Approved Online Faculty Development Program (FDP) on "Intellectual Property Rights, Technological Development, and Entrepreneurship" from March 18 to March 20, 2025. The event saw the participation of 100 academicians, researchers, and industry professionals.

Eminent speakers, including Ms. Sumit Choudhary (NIPAM, Govt. of India), Dr. Bharat Suryavanshi (RGNIIPM, Nagpur), Dr. Gowthami S (Mysore University), Mrs. Gargi Phadatare, and Mr. Amol Phadatare (PatentOne IP Services India, Pune), delivered insightful sessions.

The inaugural ceremony was attended by Vice Principal Mr. G. A. Bhosale, event coordinator Mr. M. R. Desai, and faculty members, with anchoring by Ms. Hawabi Shaikh. Across three days, participants engaged in interactive sessions, receiving valuable insights from experts.

The valedictory function, anchored by Ms. Shruti Hewalekar, featured closing remarks from Vice Principal Mr. G. A. Bhosale, Mr. M. R. Desai, and Mr. Amol Phadatare, along with participant.

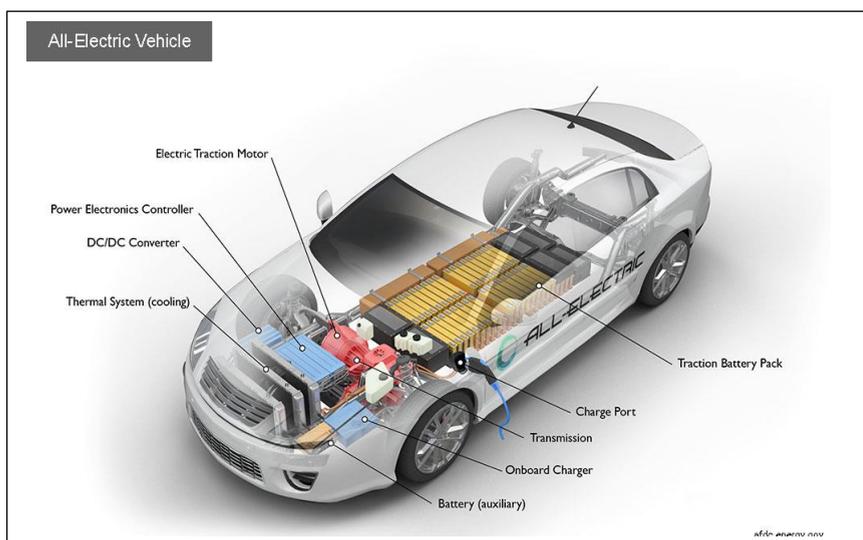
STUDENT CORNER

⚡ The Future is Electric: A Deep Dive into Electric Vehicle Technology

A Deep Dive into the Future of Sustainable Mobility Introduction Electric Vehicles (EVs) are redefining the global automotive industry by offering a sustainable, clean, and efficient alternative to traditional fuel-powered vehicles. EVs run on electric power stored in batteries, delivering zero tailpipe emissions and significantly lower operational costs. The global automotive landscape is undergoing a historic transformation — a shift from internal combustion engines (ICE) to electric mobility. At the heart of this transition lies **Electric Vehicle (EV) technology**, which promises a cleaner, quieter, and more efficient transportation system. This blog takes a **deep technical dive** into the world of EVs — covering their architecture, working principles, battery technologies, power electronics, control systems, infrastructure.

A variety of elements, such as price cuts and heightened awareness of environmental matters and climate change, are driving the rising popularity of electric vehicles, or EVs. This study reviews the advancements of EVs in relation to trends in battery technology charging methods, and emerging research opportunities and challenges. Specifically, it conducts an analysis of the current state of the global EV market and its future possibilities.

Since the battery is a crucial component of EVs, the article includes an in-depth evaluation of battery technologies, from lead-acid to lithium-ion. Furthermore, we explore the different standards that exist for the charging process of EVs, along with concepts for power regulation and battery energy management. We conclude our work by presenting our predictions for the imminent future of this field and the research areas that remain untouched by both the academic and industrial sectors.



Ms. Sayali Hareram Giri (TY EE)