

## Department of Electrical Engineering

GOVERNMENT POLYTECHNIC KHAMGAON

(Under Directorate of technical Education, Maharashtra Government)



Vol. 04 | No. 01 | A.Y 2023-24

<http://www.gpk.edu.in/>

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- From HOD's Desk
- From Editor's Desk...
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### VISION:

“To impart quality and value based education to recognize technical professional in field of electrical Engg ”

### MISSION:

Department of Electrical Engineering is committed to:

- M1.** To produce engineers with essential knowledge, technical skills and ethical values to serve the society and nation.
- M2.** To develop globally competent professionals in electrical engineering.
- M3.** To impart training, Research, Entrepreneurship abilities and skills to have all round development of students
- M4.** To provide best possible practices to encourage the students to be a lifelong learner

### PROGRAM EDUCATIONAL OBJECTIVES (PEOS):

- **PEO1:** Provide socially responsible, environment friendly solutions to Electrical engineering related broad-based problems adapting professional ethics.
- **PEO2:** Adapt state of the Electrical engineering broad-based technologies to work in multi-disciplinary work environments.
- **PEO3:** Solve broad-based problems individually and as a team member communicating effectively in the world of work.

### From Principal's Desk...



*Dear Readers,*

On behalf of the faculty, staff and students, I am pleased to welcome you to EE Department. Government Polytechnic Khamgaon is one of the leading technical institutes for diploma education in Vidarbha region, always strives for quality education since its inception. In the last six decades it has successfully nurtured the scientific temper, Professional Competence and Social Commitment among the budding technocrats to find

solutions to the problems and serve the global society. This academic year is very important for Electrical Engineering Department as they are uploading SAR for NBA accreditation. I appreciate the endless efforts of HOD, faculty and staff of EE department for NBA work. Finally, I wish best of luck for all the team members for future publication.

**Dr. Sameer S. Prabhune**  
*Principal*  
*G. P. Khamgaon*

### From Hod's Desk...



*Dear Readers,*

It is joyful moment to publish this issue of newsletter. I appreciate the department for such an initiative to provide a platform for communicating the innovative ideas of the students and faculty members. Newsletter is an excellent way for the students to publish their success stories, innovative ideas and findings. I strongly believe that this newsletter will reflect the academic achievement and departmental progress.

This A.Y (23-24) of publishing Four volume of newsletter reflects the new beginning of teaching learning process in the department. In this year Electrical final year students are please in Different company. Also Department of Electrical Engineering uploading SAR towards prestigious NBA accreditation. I appreciate sincere efforts of all faculties and staff of department towards NBA preparations. Active participation and suggestions of institute head Principal Dr. S. S. Prabhune sir helped to planning NBA accreditation.

**Shri.M.W.Mundhada**  
*Head of Department*  
*Electrical Engineering*

## From Editor's Desk...



### Dear Readers,

It is indeed a great honor to be the Newsletter Editor for the Electrical Engineering. Department and it is an immense pleasure to launch the Four edition of AY 2023-24.

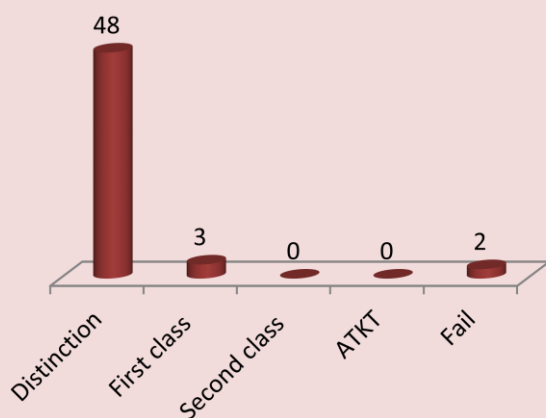
In this issue, we will recount the various projects and activities in which department is actively involved. Few points I would like to highlight here are, planning NBA preparation and Activity of department.

Finally, I would like to thank Shri. M.W.Mundhada sir (I/C HOD, EE), and all Electrical department lecturer for ever lasting support throughout the creation of this edition. Also, I would like to thank Mr.Vijay Maind sir for Guiding me to publish this newsletter.

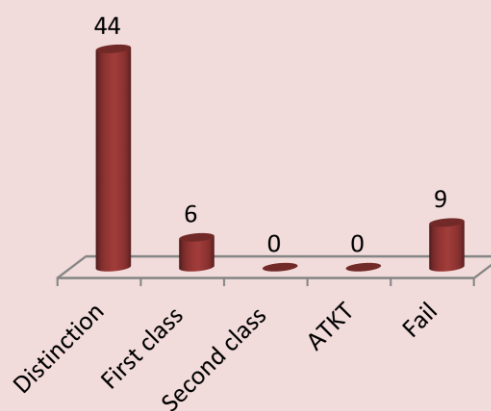
**Mr.Shrihari Kulkarni**  
News letter coordinator

Final Year			
A.Y 2023-24			
Wintter-23		Summer-24	
Distinction	48	Distinction	44
First class	03	First class	06
Second class	00	Second class	00
Atkt	00	Atkt	00
Fail	02	Fail	09
Total	53	Total	59

### Wintter-2023

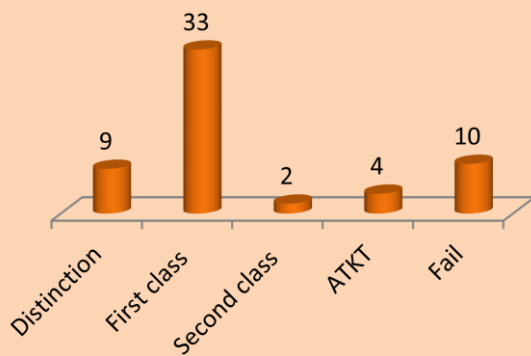


### Summer-24

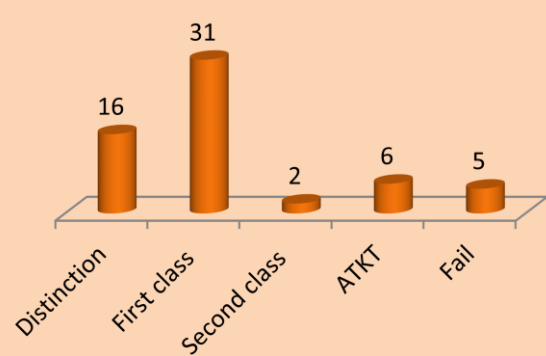


Second Year			
A.Y 2023-24			
Wintter-23		Summer-24	
Distinction	09	Distinction	16
First class	33	First class	31
Second class	02	Second class	02
ATKT	04	ATKT	06
Fail	10	Fail	05
Total	58	Total	60

**Wintter-23**

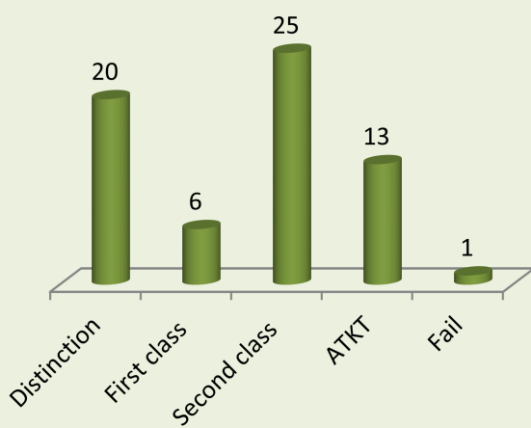


**Summer-24**

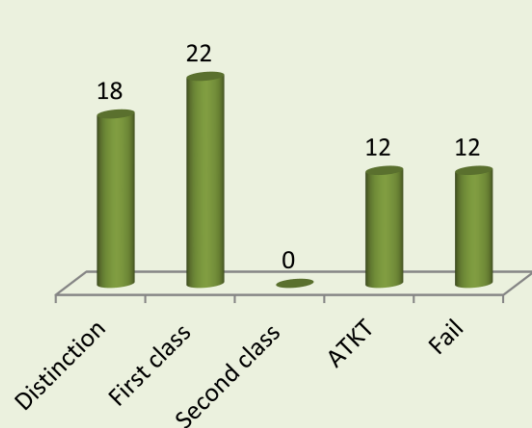


First Year			
A.Y 2023-24			
Wintter-23		Summer-24	
Distinction	20	Distinction	18
First class	06	First class	22
Pass	25	Second class	0
ATKT	13	ATKT	12
Fail	01	Fail	12
Total	65	Total	64

**Wintter-23**



**Summer-24**



# E-VEHICLE

An **electric vehicle (EV)** is a motor vehicle whose propulsion is powered fully or mostly by electricity. EVs encompass a wide range of transportation modes, including road and rail vehicles, electric boats and submersibles, electric aircraft and electric spacecraft. Early electric vehicles first came into existence in the late 19th century, when the Second Industrial Revolution brought forth electrification and mass utilization of DC and AC electric motors. Using electricity was among the preferred methods for motor vehicle propulsion as it provided a level of quietness, comfort and ease of operation that could not be achieved by the gasoline engine cars of the time, but range anxiety due to the limited energy storage offered by contemporary battery technologies hindered any mass adoption of private electric vehicles throughout the 20th century. Internal combustion engines (both gasoline and diesel engines) were the dominant propulsion mechanisms for cars and trucks for about 100 years, but electricity-powered locomotion remained commonplace in other vehicle types, such as overhead line-powered mass transit vehicles like electric trains, trams, monorails and trolley buses, as well as various small, low-speed, short-range battery-powered personal vehicles such as mobility scooters. Plug-in hybrid electric vehicles use electric motors as the primary propulsion method, rather than as a supplement, did not see any mass production until the late 2000s, and battery electric cars did not become practical options for the consumer market until the 2010s. Progress in batteries, electric motors and power electronics has made electric cars more feasible than during the 20th century. As a means of reducing tailpipe emissions of carbon dioxide and other pollutants, and to reduce use of fossil fuels, government incentives are available in many areas to promote the adoption of electric cars.

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## Vehicle types :-

- **Pure-electric vehicles:-** A pure-electric vehicle or all-electric vehicle is powered exclusively through electric motors. The electricity may come from a battery (battery electric vehicle), solar panel (solar vehicle) or fuel cell.
- **Hybrid EVs :-** A hybrid electric vehicle (HEV) is a type of hybrid vehicle that couples a conventional internal combustion engine (ICE) with one or more electric engines into a combined propulsion system. The presence of the electric powertrain, which has inherently better energy conversion efficiency, is intended to achieve either better fuel economy or better acceleration performance than a conventional vehicle.
- **Electrically powered space craft :-** The power sources used for spacecraft are batteries, solar panels and nuclear power. Current methods of propelling a spacecraft with electricity include the arcjet rocket, the electrostatic ion thruster, the Hall-effect thruster, and Field Emission Electric Propulsion.



**Mr Aadity Jumle**  
Electrical Engg Department  
Government polytechnic khamgaon



## Students Achievement.....

Second year Students have participation in Paper Competition, Technical Quiz Competition,, Group discussion Competition, Poster Competition, (Technical Event) Organized by Dr. V.B.Kolte college of Engg. Malkapur.



## ➤ Students Achievement.....

Consolidated First Prize won by Swati Nimkarde and Poonam Ingle in MSBTE State level Technical Paper Presentation Competition Organized by G. P. Gondiya .





## ➤ Students Achievement.....

Consolidated First Prize won by Aditya Jumle and Om Sant in MSBTE State level Technical Quiz Competition Organized by Dr. V.B.Kolte College of Engg. Malkapur.





## ➤ INDUSTRIAL VISITS.....

Industrial Visit for EE6I Students at 132 kV Distribution Substation Shegaon road Khamgaon





## ➤ INDUSTRIAL VISITS.....

**Industrial Visit for EE6I Students at 132/33/11kV Distribution Substation Khamgaon .**



**Industrial Visit for EE4k Students at Chandanshesh Transformer Khamgaon.**





## ➤ INDUSTRIAL VISITS.....

**Industrial Visit for EE4K Students at 33/11kV Distribution Substation MIDC Khamgaon .**



**Industrial Visit for EE6I Students at Solar Research Center SSGMC Shegaon.**





## ➤ Social Activates.....

### ➤ Blood Donation Camp .....



• Health checkup medical camp is organized jointly by Institute & Panchsheel Homeopathy Medical College Khamgaon once in a year



➤ Participation in inter institute/state/national events by students...



Students have participated in Carrom and Chess Sports IEDSSA 2023-24 and secured Winner up Prize

**TRAINING & PLACEMENT:**

Sr. No	Name of Industry	No. of students selected
1	Bharat Forge	02
2	John Deere Pune	08
3	Subrros Pvt Ltd Pune	01
4	Siemens India	07
5	One Asia Network Pvt Ltd Khamgaon	04

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