

Department of Electrical Engineering Newsletter December 2023



Renewable energy is a clear winner when it comes to boosting the economy and creating the jobs.

TOM STEYER



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VISION, MISSION, AND PROGRAM EDUCATIONAL OBJECTIVE

Vision:

To aspire for excellence in imparting quality education in the field of Electrical Engineering with an eagerness of developing a professional mindset along with good human values.

Mission:

- To maintain a benchmark in quality of educational standards in the field of Electrical Engineering.
- > To provide a platform for exploring a professional mindset.
- To promote ethical practices for developing good human values.

Program Educational Objectives:

- > To provide students with the knowledge of basic sciences and social sciences in general and Electrical engineering in particular, so as to impart the necessary skills to analyze and synthesize electrical circuits, algorithms and complex apparatus.
- To inculcate in student Professional attitude, effective communication skills and capability to succeed in multi-disciplinary and diverse fields.
- To provide technical knowledge, skills and competence to identify, comprehend and solve problems in industry, research and academics related to power, information and hardware.
- > To prepare and inspire the students to become future researchers/scientists with innovative ideas for a sustainable development.



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Program Outcomes:

- Engineering Knowledge: Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- ➤ <u>Problem Analysis</u>: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- Design & Development of Solutions: 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.
- Conduct Investigation of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.
- ➤ <u>Modern Tools Usage</u>: 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.
- ➤ <u>The Engineer and Society:</u> 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.
- Environment & Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, demonstrate the knowledge of, and need for sustainable development.
- Ethics: Apply ethical principles and commit to professional ethics, responsibilities, and norms of engineering practice.
- ➤ <u>Individual & Team work</u>: Function effectively as an individual and as a member or leader in diverse teams, and in multidisciplinary settings.



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- Communication: Communicate effectively on complex engineering activities with the engineering community and with society, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- ➤ <u>Project management & Finance</u>: Demonstrate knowledge and understanding of the engineering 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.
- Life-long Learning: 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

- The ability to analyze, design, and simulate electrical system, and implement them in various application.
- The ability to apply engineering knowledge, technical skill and solution of complex problem in various field of electrical engineering.



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About the Department:

The department is well established with number of experienced faculty members. The department moves with a mission to produce competent and disciplined electrical engineers.

Departmental laboratories are spacious and adequately equipped. The various faculties of department have presented/published papers in National/International Conferences and journals. Department organizes workshops/seminars in different areas. For all round development of student various expert lectures, industrial visits are periodically organized. The academic results are excellent.

Department of Electrical Engineering aims to establish and concentrate in various areas of electrical engineering such as power quality, energy management, audit etc. and to offer value added services to industries as well as society.

Laboratories:

Departmental has six well-established laboratories and highly updated and advanced equipment that will help to enhance the student's technical knowledge to improve their technical skill that can be utilized to explore their knowledge in the outside industrial world.

List of laboratories

- 1. DC Machines Lab
- 2. AC Machines Lab
- 3. Power Electronics Lab
- 4. Measurement Lab
- 5. Communication Lab
- 6. PSPS Lab
- 7. Project Lab
- 8. BEE Lab
- 9. Computer Lab
- 10. Simulation Lab



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Message by Principal

Dear All,

It gives me an immense pleasure to welcome you to VIVA Institute of Technology, Virar affiliated to University of Mumbai, governed by Vishnu Waman Thakur Charitable Trust. We believe in the fact that "Education is a journey from Information to Knowledge and from Knowledge to Wisdom. The Engineering graduate should be capable to apply knowledge to real time engineering problems and provide solutions, which are technically sound as well as economically viable. Only creative minds can accomplish this task.

A Newsletter mirrors the success story of an institution and act as a great medium to reach out to the outer world. It reflects upon the persistent and committed efforts made by faculty, and students for taking the institution one-step ahead. Continuing the same tradition, this issue of newsletter, reflects upon commendable contribution made by all members of Electrical engineering department in their fields of expertise as well as for the overall growth of the institute. I congratulate everyone for their value adding work for the institution and do expect the same in times to come. I also congratulate the editorial team for bringing out present issue of newsletter.

VIVA Institute of Technology nurtures a unique system of education for creating dynamic leaders in the corporate sector, entrepreneurs, academicians, researchers and professionals who contribute to the development of society and nation at large. It has an aesthetically designed and elegantly built campus furnished with state of art equipment and facilities. Here, education is not only focusing on 4 years B.E. degree course but also creating a platform for students to realize their dreams, hone their cognition, sharpen their competence and carve out a wholesome personality.

Wishing you all the best for the fruitful learning journey at VIVA Institute of Technology and for a bright future!

Principal

Dr. Arun Kumar



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HOD's Message

The Aim of Electrical engineering department is to provide quality education. The process of learning is extremely important in life. What you learn, how you learn and where you learn, play crucial role in developing your intellectual capability, besides career. I am proud to see that the students and faculty of our department have put in appreciable effort into creating this newsletter. This newsletter highlights the academic and non-academic activities of both, faculty and students of the Department of Electrical Engineering. I congratulate the editorial team for their brilliant and original efforts. I wish all the students and faculty a great academic career.

H.O.D

- Prof. Bhushan Save



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Teaching Staff Members:

Name	Dr. Deepak Sajnekar
Designation	Associate Professor
Qualification	Ph.D. in control system, M. E
Experience	Teaching: - 24.5 Years
Total Experience	24. Years

Name	Prof. Bhushan Sharad Save
Designation	Assistant Professor (HOD)
Qualification	M.E.: - EXTC
Experience	Teaching: - 17.5 Years Industrial: - 1 Year
Total Experience	18.5 Years

Name	Prof. Anoj Kumar Yadav
Designation	Assistant Professor
Qualification	M. Tech: - Power Electronics & Drives
Experience	Teaching: - 12.5 Years
Total Experience	12.5 Years

Name	Prof. Rahul Vijay Abhyankar
Designation	Assistant Professor
Qualification	M.E.: - Power System Engineering
Experience	Teaching: - 8 Years
Total Experience	8 Years

Name	Prof. Ritesh Ramesh Chavan
Designation	Assistant Professor
Qualification	M. Tech.: - Power System Engineering
Experience	Teaching: - 4.5 Years Industrial: - 3.5 Years
Total Experience	8 Years



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Name	Prof. Sangita Raju Kamble	
Designation	Assistant Professor	
Qualification	MTech.: - P.E.P. S	
Experience	Teaching: - 5.5 Years Industrial: - 2	
Total Experience	7.5 Years	

Name	Prof. Tejas Sankpal
Designation	Assistant Professor
Qualification	M.E Pursuing
Experience	Teaching: - 1.5 Years Industrial: - 1
Total Experience	2.5 Years

Name	Prof. Amit Kumar Vishwakarma
Designation	Assistant Professor
Qualification	B. E
Experience	Teaching: - 0.5 Years Industrial: - 1
Total Experience	1.5 Years



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Non-teaching Staff Members:

Name	Santosh Ashok Joshi
Designation	Lab Assistant
Qualification	M. Sc. Electronics & Communication (Pursuing)
Experience	Lab: - 17.5 Years Industrial: - 4 Years
Total Experience	21.5 Years

Name	Vaibhav Yashwant Patil
Designation	Lab Assistant
Qualification	I.T.I, NCVT & B. A
Experience	Lab: - 10.5 Years Industrial:- 5 Years
Total Experience	Years: - 15.5 Years

Name	Lav Sham Jadhav
Designation	Lab Assistant
Qualification	Diploma in Electrical Engineering
Experience	Lab: - 1.8 Years Industrial: - 2.1 Years
Total Experience	Years: - 3.9 Years

Name	Sanjay Gajanan Mohite
Designation	Peon
Qualification	S.S.C
Experience	Lab: - 21.5 Years Industrial: - 00 Years
Total Experience	Years: - 21.5 Years



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Toppers List

B.E Toppers (Semester VIII)

Sr No	Rank	Name	CGPI
1.	First	Ramteke Prerana	8.84
2.	Second	Patil Rinkal	8.62
3.	Third	Gharat Ajinkya	8.59

T.E Toppers (Semester VI)

Sr No	Rank	Name	CGPI
1.	First	Pathare Mayur	8.05
2.	Second	Varma Virendra	7.76
3.	Third	Patel Jay	7.53

S.E Toppers (Semester IV)

Sr. No.	Rank	Name	CGPI
1.	First	Kargutkar Omkar	8.91
2.	Second	Joil Roshan	7.83
3.	Third	Pawar Rushikesh	6.98



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Welcome to the Electrical Engineering Department, where innovation sparks and dreams of electrifying the future come to life. This year the department conducted various events and activities to emphasize student overall development and improvement. Beyond the classroom, departments spearhead research endeavors, contributing to the advancement of knowledge. This includes academic as well as extracurricular activities. Students are motivated to participate and present papers at national-level conferences. Industrial visits are also arranged occasionally to get exposure to the industrial environment. Guest lectures are also organized by inviting resource persons from industries. The faculty development program, approved by ISTE, is also organized for their skill development.

Commencement of Odd semester

On 10th July 2023, the commencement of the even semester for students of Second Year (SE), Third Year (TE), and Fourth Year (BE). All students were instructed to attend the college as per lectures and practical schedules. The guideline was provided to students on course registration. The faculty member provided guidance on using digital platforms for online learning.

• Impact of Heavy Rain

On 19th July 2023-22nd July 2023, early leave and online lectures were conducted due to heavy rain. A collector-declared holiday resulted in rescheduled lectures.

• Training & Placement Cell Event

On 26th July 2023, the Career Guidance Program for BE students were organized in the seminar hall.





Highlights of Career Guidance Program



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NAAC Mock Visit

On **29**th **July 2023**, the NAAC Mock visit was scheduled by the institute to get firsthand experience of NAAC visit. Muharram was observed as a non-instructional day.

• Faculty Workshop

On 2nd August 2023 &, 19th August 2023, a training program on EDBA software was successfully conducted for faculty members in the seminar hall. The schedule of the workshop was informed by the institute through the notice ref no. VIT/1161/2023-24 dated 01/08/2024 and VIT/1218/2023-24 dated 17/10/2023 respectively.



Training Program on EDBA Software in Seminar Hall

• Display of Defaulter list I

On 3rd August 2023, Defaulter list for the month of July is displayed on digital notice board for all classroom. Defaulter students were identified and informative letter to parents were sent. Students are advised to maintain 75% attendance and take necessary actions to improve their academic requirements. The department is committed to maintaining open lines of communication with parents and ensuring involvement in their child's educational journey.

PTA Meeting

On 5th August 2023, the parents-teacher association meeting was held as planned in the academic calendar to discuss department activities, student progress, and performance. The Parents were intimated about the meeting well in advance. Meeting started with welcome speech and faculty introduction followed by department presentation, address by HOD, Parents interaction. Parents also visited classrooms and practical lab.



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Parent-Teacher Association Meeting

NSS Event

On 7th August 2023, the NSS event, Tree Plantation Abhiyan, took place in the institute campus. The Principal, NSS coordinators and volunteers, staff and students participated in the event.



Tree Plantation Abhiyan



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• Department Meeting

On 9th August 2023, monthly departmental meeting was conducted on 9th August, 2023. The meeting was chaired by the Head of Department to address about preparation required for the NAAC peer team visit. The meeting was attended by all available faculty members and non-teaching staff members.

• Student Feedback

On 17th August 2023, student feedback I from SE, TE and BE students were taken in the computer lab through google form to express their opinions and suggestions regarding teaching methodology, and course content. Suggestions taken through feedback, improve communication channels between students and faculty.

• Non-Instructional Day

On 19th August 2023, as per notice with reference number VIT/1175/2023-24 dated 18/08/2023, non-instructional day was observed on Saturday for NAAC and admission related work.

• Training & Placement Cell Event

On 21st August 2023, the training and placement cell had organized a higher studies guidance program for BE students in seminar hall at 11 am. Students from BE class had attended the event, remaining students followed the curriculum time. The event was graced by Ms. Hiral Joshi, Senior Consultant, AECC Global, Andheri.



Higher Studies Guidance Program for BE in Seminar Hall



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• Internal Assessment- I

From 23rd August to 25th August 2023, the Internal Assessment-I was conducted for SE (SEM III), TE (SEM V) & BE (SEM VII)students. Time-table for examination was provided in advance through department notice with reference number VIT/elect/17/2023-24.

NAAC Committee Visit

From 25th August to 26th August 2023, the NAAC peer committee visited the institute campus. The Head of department and faculty members actively participated to provide all requireddocument under different NAAC criterions. The Head of department gave a presentation on academic practices followed by the department.

• Training & Placement Cell Event

On 26th August 2023, the training and placement cell had organized a placement drive for BE students in seminar hall at 11 am for The Fire Protection Company, Vasai. Students of the final year of electrical and mechanical engineering branch had participated in the drive. The drive was initiated with pre-placement talk by Mr. Chetan, Area Manager, TFPC followed by aptitude and technical tests. Total of 5 students were shortlisted for the interview round which was conducted in the officeof TFPC, Vasai. From the electrical department one student was placed in TFPC, Vasai.





Placement Drive by the Fire Protection Company

• Special leave

On 28th August 2023, the institute approved a special leave to all staff members as an appreciation for their contribution during the NAAC peer team visit.



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• Commencement of Term for DSE

On 31st August 2023, the direct second year of engineering (DSE) term for AY 2023-24 commenced as planned in the institute academic calendar for the odd 2023-24 semester.

• Workshop for BE & TE

From 31st August to 1st September 2023, department organized a workshop for TE and BE students for two days on the topic of Design and estimation of solar power plants. Workshop was conducted by Mr. Urval Chotalia, Founder, Sour Urja Solutions, Vasai. Total of 35 students participated in the workshop and the remaining students followed thecurriculum timetable. The workshop was successfully conducted and encouraged students to think sustainably and consider renewable energy solutions in their future endeavors.





Workshop conducted by Mr. Urval Chotalia, Founder, Sour Urja Solutions, Vasai

• Display Result of IA I

On 1st September 2023, Result of internal assessment I of SE, TE & BE students displayed on the digital notice board of google classroom. This result was analyzed by respective subject in charges to identify slow & fast learners. Remedial lectures were planned for slow learners.



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Defaulter list II

On 4th September 2023, Defaulter list II for the month of August was displayed on the digital notice board of google classroom. Defaulter students were identified and letter to parents were sent. Students are advised to maintain 75% attendance and take necessary actions to improve their academic requirements. The department is committed to maintaining open lines of communication with parents and ensuring involvement in their child's educational journey.

• Compensatory Leave

On 2nd September 2023, the Institute approved a compensatory leave to all staff members to compensate for the non-instructional day observed on 5 May 2023.

• Teacher's Day

On 5th September 2023, the Teacher's Day celebration was meticulously planned and executed by a dedicated committee comprising faculty members and students from the Electrical Department. The team worked tirelessly to ensure the smooth flow of events and the active participation of both students and teachers.



The Teachers' Day celebration, orchestrated by EESA



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• Tech Chase 2023 & Engineers' Day

From 14th September &15th September 2023, the Institute organized an annual technical event, "Tech Chase 2023". Students of the electrical engineering department had prepared 5 different technical games forevent. Also, all faculty members and students visited other departments to participate in games organized by them. This event was a major success and provided motivation for students to apply technical knowledge into applications.



Annual technical event, "Tech Chase 2023"



Engineers Day Celebration by Faculty Members and Students



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• Guest Lecture

On 15th September 2023, Department organized a guest lecture on "The Evolution of Electric Vehicle Technology: Advancements, Challenges and Future Prospects" for SE class. This lecture was conducted by Mr. Aditya Sawant of Robokart Pvt Ltd.





Guest lecture for SE conducted by Mr. Aditya Sawant

Smart India Hackathon

On 18th September 2023, The Campus Internal Smart India Hackathon 2023 was organized for all students of theinstitute. The event was successfully organized under supervision of SIH in charge, faculties and principal.





Campus Internal Smart India Hackathon



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• Mid Term Break

From 19th September to 22nd September 2023, the Institute remained closed on 19th September, 2023 on the occasion of Shri GaneshChaturthi. The Institute awarded a mid-term break to all the staff members.

• Department Meeting

On 25th September 2023, monthly Departmental meeting was conducted. The meeting was chaired by the Head of Department to address the syllabus coverage report, DSE curriculum, DAB, NAAC etc.

• Guest Lecture

On 27th September 2023, the Department organized a guest lecture on "Siemens PLC programing" for TE and BE students. The lecture was conducted by Mr. Prafulla Patil and Dr. Vikas Gupta, Professor, Vidyavardhini College of Engineering & Technology.





Guest Lecture by Mr. Prafulla Patil and Dr. Vikas Gupta benefitting SE and TE students

• Industrial Visit

On 29th September 2023, Industrial Visit for third year students was organized by the department. Total of 30 students were registered for the industrial visit to the Zenith EngineeringCorporation, Vasai accompanied by 2 faculty members. The organization operates in the field of Electrical and Electronic Engineering applicable to various Industrial, Power, Infrastructure and Commercial Projects. Industrial visit was coordinated by Prof. Anoj kumar Yadav and Prof. Amit Vishwakarma, andguided by Mr. Mahatra, Manager at Zenith Engineering Corporation



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Industrial Visit at Zenith Engineering Corporation

• Display of Defaulter list III

On 3rd October 2023, Defaulter list for the month of September is displayed on a digital notice board for all classroom. Defaulter students were identified and letter to parents were sent.

• Internal Assessment- I (DSE)

From 3rd October to 9th October 2023, the Internal Assessment-I was conducted for DSE (SEM III) students. To compensate for the limited time available to complete the semester syllabus, IA-I was conducted in the second half of the day with regular lectures being conducted in the first half.

• Industrial Visit

On 5th October 2023, Industrial Visit for final year students was organized by the department. Total of 27 students were registered for the industrial visit to the Nuclear Power Plant, NPCIL, Tarapur. Tarapur Atomic Power Station is located about 140 km North of Mumbai in Palghar district of Maharashtra. This Power Station is situated on the sea shore and comprises four units. Initially, unit 1&2 were established in 1969 with an initial generating capacity of 210 MW each. Industrial visit was coordinated by Prof. Mukeshkumar Mishra, and guided by Mr. Prashant Raut, Plant Manager at NPCIL.



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Industrial visit to the Nuclear Power Plant, NPCIL for BE Students

Compensatory Leave

On **7th October 2023**, the institute approved a compensatory leave to all staff members to compensate for the non-instructional day observed on 26th August, 2023.

• Training & Placement Cell Event

From 9th October 2023 to 13th October 2023, the training and placement cell had organized an Aptitude Training for BE students in seminar hall. Students of BE class of all branches participated in the training. Training was conducted in two sessions for each day between 9:30 pm-12:30 pm & 1:00-4:00 pm. The training was informative and covered many topics of aptitude with shortcuts and easysolutions provided to students.

• Library department event

On 13th October 2023, the library department organized an event on "NDLI Awareness" to create awareness about NDLI registrations.

• Faculty Training

On 13th October 2023, the department organized an on-hand faculty training on "Formatting guidelines for mini/major project report". The program was conducted by Prof. Rahul Abhyankar, Electrical Department.



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• Internal Academic Audit and External Academic Audit

On 10th October 2023 &16th October 2023, Internal and external academic audits were conducted by the department on above mentioned dates.



Highlights of Department Internal and External Audit

• Women Development Cell Event

On 23rd October 2023, Women Development Cell (WDC) in association with the Internal Complaints Committee (ICC) organized an event, "Jagar Stree Shakticha" on auspicious occasion of Navratri.

• Department Meeting

On 30th October 2023, Monthly departmental meeting was conducted for term end documentation. The meeting was chaired by the Head of Department to address the term end documentation, O&P conduction and NAAC related data etc.

• Internal Assessment- II

From 30th October to 1st November 2023, the internal assessment-II was conducted for SE & DSE (SEM III), TE (SEM V) & BE(SEM VII) students. The time-table for examination was provided in advance through department notice withreference number VIT/elect/51/2023-24.



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• Course Exit Survey

On 1st November 2023, the course exit survey form was filled and submitted by all students of the department. This feedback is analyzed by individual faculty for CO mapping documentation. A course exit survey was taken from Third Year (TE) and Fourth Year (BE) students in the department.

Submission of Term Work & Term End

From 1st November to 2nd November 2023, the submission of term work was organized for Second Year (SE), Third Year (TE), and Fourth Year (BE) students including term work, assignments, projects, and other academic activities.

• Oral and Practical examination

From 3rd November to 9th November 2023, OR/PR Exams commenced as scheduled by the exam coordinator of the department withreference to the notice number VIT/elect/056/2023-24.

• Faculty Training

On 1st November 2023, the Department organized an on-hand faculty training on "CO-PO attainment". This was conducted by Prof. Rahul Abhyankar, Electrical Department.

• Diwali Holidays

From 13th November to 15th November 2023, Diwali holidays were observed for all students and staff members. College was closed during vacation, giving students a respite from academic responsibilities and a chance to recharge.

• Major Project I review

On 17th November 2023, For BE students, the major project I review was conducted. All groups of students presented their project in the presence of panel for assessment of major project I.

• Commencement of Theory Exam for SE, TE

On 21st November 2023, End semester examination of SE & TE students commenced as per guidelines and time-tableprovided by University of Mumbai.

• Department Meeting

On 28th November 2023, Monthly departmental meeting was conducted and chaired by the Head of Department to address the term end documentation, CO-PO mapping documentation and NAAC related data etc.



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• Training & Placement Cell Event (MoU)

On 29th November 2023, the training and placement cell coordinators Prof. Ritesh Chavan (Electrical) & Prof. Rajkumar Devkar (Mechanical) visited Adilec Pvt Ltd. Adilec Pvt Ltd is a reputed organization and manufacturer of automotive cables, Indian plugs and UL cables. The MoU had been signed by Dr. Arun Kumar (Principal), Prof. Bhushan Save (HOD-Electrical) and Mr. Deliwala (Founder- Adilec Pvt Ltd)



MoU Signed between the training and placement cell of department and Adilec



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This academic year has been marked by significant achievements and enriching experiences across all our departmental activities. The range and depth of the academic programs offered have not only expanded our knowledge base but have also fostered critical thinking and innovative approaches among students. Through a combination of rigorous coursework, collaborative projects, and dynamic extracurricular engagements, we have successfully navigated the challenges of the academic landscape.

!!Thank You!