



Affiliated to Savitribai Phule Pune University College Code – CEGP014980



Tribute to Savitribai Phule



Vision of Institute

Educational institution for empowerment through technological excellence towards sustainable development

Mission of Institute

- Value based and demand driven education using best practices
- Promotion of research, innovation and entrepreneurship
- Commitment to sustainable solutions in service of society
- Capability to face local and global challenges

Principal's Message

Greetings!

As we turn the page on another academic year, it fills me with immense pride to see the vibrant tapestry of achievements and experiences woven into the fabric of our college magazine. The spirit of innovation, perseverance, and creativity that shines through these pages is a testament to the exceptional individuals who make Government College of Engineering and Research Avasari (Khurd) the thriving institution it is today.

This year has been a year of significant milestones. We've welcomed a fresh batch of bright minds brimming with potential, witnessed our students excel in academics and competitions, and celebrated the dedication of our faculty who nurture and guide them.



We've inaugurated new facilities, launched groundbreaking research initiatives, and strengthened our ties with the community – all contributing to a vibrant learning environment that fosters excellence in every domain.

As a government college of engineering, we carry a special responsibility. We are entrusted with molding the minds and shaping the futures of not just individuals, but the architects of tomorrow's India. Remember, your journey extends beyond classrooms and laboratories. Embark on this adventure with open minds, embrace the opportunities that come your way, and don't shy away from challenges.

Let us leverage the power of collective intellect, push the boundaries of knowledge, and strive for solutions that benefit society. Let us, together, be the engineers who not only build bridges and structures, but also bridges of understanding and progress.

With immense pride and optimism

Dr. D. R. Pangavhane Principal, GCOEARA

Faculty Co-ordinator's Message

I am delighted to extend a warm welcome to all of you to our college magazine, an outstanding creation by our talented and dedicated students. I want to congratulate the students of Government College of Engineering and Research, Avasari (Khurd), who have taken the initiative and made valuable contributions to this edition of the college magazine, Zenith- 2023. Magazines of this nature provide a platform for Engineering students to showcase their hidden talents, express ideas, and share thoughts through articles, poems, and reflections on life and experiences both within and beyond the college campus. I extend my gratitude to our Principal, Dr. D. R. Pangavhane Sir, all Heads of Departments, faculty members, staff, student incharges, and contributing students for their immense support in making this magazine possible.



Thanks Prof. Prajakta B. Pimpalkar Magazine In-charge

Faculty Co-ordinator's Message

This is a memorable and eye-catching moment for me to place in your hands Zenith, the College Magazine of Government College of Engineering and Research, Avasari (Khurd) for the year 2022-23. Zenith shed light on the inborn adroitness present in our college engineers. It is a perfect blend of sharp minds and omnipotent energies of engineers. This magazine mirrors the innate and dexterous writing abilities, the immense hidden talent and creativity of our students. It is snapshot of vibrancy of GCOEARAs life.



My special and deep hearted thanks to Principal Dr. D. R. Pangavhane Sir, All Head of Departments and Faculty Members for continuous encouragement, guidance, and support, throughout this endeavour. I would like to place on record my gratitude and heartfelt thanks to my editorial board for continuous assistance throughout this task. Last but not the least I am very thankful to all authors, who have made available their articles, poems, concerned materials and who have contributed directly or indirectly to make this task successful.

Wishing you an enriching experience as you explore the pages of "Zenith 22-23", the adventures journey. Remember: "Nothing is impossible. The word itself says 'I'm possible'." So, push yourself, because no one else will do it for you.

Prof. Sneha G. Farkade Magazine In-charge

Magazine Committee Member



Ms S. B. Palve TLA Civil

Student Co-ordinator Message

Welcome to the latest issue of our college magazine! This isn't just another collection of articles – it's a snapshot of our campus life, filled with exciting discoveries, campus buzz, and stories that capture our unique spirit.

I'm excited to share this collaboration with you. Every page is packed with contributions from our fellow students – writers, photographers, and anyone with a story to tell. Whether you're already a creative whiz or just looking for something interesting to read, there's something for everyone here.



So, flip through the pages, think with us, and maybe even find yourself inspired to join the conversation. This magazine is yours – share your own thoughts, dreams, and experiences, and let's keep this story going together!

Ruturaj Aher [BE Computer 2024] Magazine Co-ordinator

Student Co-ordinator Message

We're thrilled to present a collection of stories, art, and memories that reflect the vibrant spirit of our college community. Thank you to everyone who has contributed to making this magazine a reality. May it serve as a lasting tribute to our college's spirit and a source of inspiration for years to come. Through these pages, we aim to encapsulate the essence of our experiences, accomplishments, and aspirations. We invite you to immerse yourselves in these pages, to explore, to contemplate, and to be inspired. We hope this magazine brings joy and inspiration to your day. Happy reading!



Om Topale [BE Automobile 2024] Magazine Co-ordinator

I invite you to embark on a journey of inspiration, knowledge, and creativity. Explore our pages, immerse yourself in stories that ignite your passions, and discover the diverse voices and perspectives within our community. Your support fuels our commitment to delivering quality content and fostering meaningful connections. Thank you for being a part of our journey!"

Utkarsh Chavan [BE Computer 2024]

Magazine Co-ordinator





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THE CLUB SECTION

Robotics Research Lab

About Team:

The Robotics Research Lab was established in 2013. It is a platform where students perform hands-on work and gain pre-industrial knowledge. The students of the lab Design, Manufacture, and 3D Print parts of the Robot then control and automate a variety of Mechanisms and various Robotics Drives using Advanced Software. It is a platform that enables an individual to work on their Innovative Ideas and develop their Soft Skills. Lab focuses on an Interdisciplinary approach that combines the skills and knowledge associated with other Fields. We focus mainly on the competition named ABU ROBOCON at the International level and DD ROBOCON at the national level held at IIT Delhi. The team also participates in other events like IIT Bombay Techfest, and other College-Level Robotics Competition.

About Competition:

The ABU Asia-Pacific Robot Contest (ABU Robocon) was founded in 2002 by the Asia Pacific Broadcasting Union. In India, Doordarshan Robocon India (DD Robocon) is organized by IIT Delhi. In the competition, Robots compete to complete a task within a set time. Every year it is hosted by one country

from the Asia-Pacific Region which is based on their Cultures.

Recent Achievements:

2022 AIR 02 International Rank 5 Theme: Lagori





Projects:

Quadrupt Robot:

This robot was manufactured for DD Robocon 2019 contest. The main purpose of this robot was to perform a particular task in the form of a horse gait



Swerve Drive Robot:

This drive system was developed for DD Robocon 2021 contest. In this type of drive system wheels of the robot are controlled using two BLDC for each wheel.

VISIS:

VISIS refers to the Visitor's Safety and Inspection System. The main purpose of the project to ensure that the person using it wears a mask or not and thus providing the service to the person.





Team Falcon

About Team

A dynamic and passionate group of students, we the Team Falcon is bound together by a shared dedication to engineering innovation, quality, and information transfer. Our multidisciplinary team has experience in robotics, drone design, aero design, and other fields.

Our dedication to research goes beyond the creation of projects. We contribute actively in the academic community by often publishing our research in renowned national and international journals such as IEEE and Springer.

We won 4th place internationally in the Line Following Robot Competition at the prestigious Indian Institute of Technology Delhi. This achievement is a result of our dedication, innovation, teamwork, and commitment to excellence in robotics. We are excited to continue pushing boundaries and developing innovative robots in the future.

We achieved amazing feats in several engineering domains in 2022–2023. We were a dominant force in the engineering sector and won significant accolades because of their dedication, creativity, and teamwork-oriented approach, which were evident in all they accomplished.

In the SAE ISS DDC competition, we achieved an incredible 18th rank, demonstrating our proficiency in aerodynamics and meticulous design. Our expertise in drone design also yielded remarkable results, at the SAE Aerothon. This achievement highlighted in the mastery of control systems, programming, and automation, allowing us to build programmable drones capable for conquering complex tasks and navigating challenges.

Our team will be focusing on development of autonomous drones capable of performing certain tasks which can be used in industries. Also, we are determined to design a low weight and aerodynamic RC plane which can lift maximum payload. In the robotics sector, we thrive to conquer the knowledge regarding line following robots, cozmo clench bots and aqua rocketry which will help us to target state and national level technical competition.



Achievements

1) World Robotics Championship by Technoxian

- International Rank 4 for Fastest Line Follower robot

- Line following robots are one of the most simplistic types of robots that performs tasks with accuracy

by tracking a black or a white line using IR Sensors.

- The added challenge of this competition is that the robots have to compete against time to complete the given arena at event location and the fastest wins the competition.



2) Aircraft Designing Workshop Organised by SAE India

- Best RC Glider aircraft made at the workshop location and only aircraft that performed roll

- SAEINDIA Aerospace Forum has organised New Drone Development Challenge competition for students with primary focus on designing and building piloting skills of Unmanned Aircraft System (UAS) to prepare them industry ready for the emerging market.

- As a part of AeroTHON 2022, students undertake a full design and build an unmanned aerial vehicle meeting specific mission requirements, culminating in a final fly-off event.



3) Techfest IIT Bombay

- Best designed RC Boat with unique catamaran structure

- The task for the competition to design and build manually controlled boat that has to sail through obstacles in the arena and complete the race task before other boat.

- Designing an inherently self-propelling RC boat is challenging due to uncertain weight distribution during the design process.



- One of the Unique And Powerful Pick And Place Mechanism Bot

- Our team initiated participating in the competition named Cosmo Clenz, which consists of making a bot that consists of a pick and place mechanism, this bot had to carry a cube and complete a given path of rough terrain and many obstructions in the shortest possible time with completing the tasks on its way.

- The challenging part there was to design a bot using practical electronic knowledge and using dynamics to fight rough terrain.

-The second most important was to design a

mechanism that could pick the block as well as sustain the route.

4) SAE ISS Drone Development Challenge

- Secured AIR 18 by designing and developing RC aircraft

- The goal of the competition is to present realworld engineering challenges to Bachelor's, Master's, and Diploma students. It has been created to expose students to the kinds of scenarios that engineers deal with in their everyday workplaces.

- Each team must come up with, design, and create a fixed-wing UAV prototype that satisfy.





5) Techno Spark Organised by Jai Hind College of Engineering, Junnar

- Rank 1 in Aqua Rocketry

- Aqua rocketry is an event that gives an opportunity to showcase and implement knowledge about the laws and concepts of physics that govern the motion of a rocket in the air, its take-off, its trajectory, etc.

- The competition consisted of creating a water bottle rocket and using a launcher has to cover maximum distance.



6) Mindspark, A Technical Event of College of Engineering, Pune

- Secured Rank 2 in Take-off (Aqua Rocketry) event

- Take-off consists of the participants using a pressure launcher to launch a water bottle rocket into the air. Participants have to construct their own water bottle rocket of a design of their choice.

- Round 1 - The participants had to use launcher to launch water bottle rockets and land it in the given sector.

- Round 2 - In this round, points were awarded based on the distance between the rocket and the target.

- Round 3 - The participants had to attach a deployable parachute to the rocket using materials and design of their choice.



Research Papers

- Our published research papers:

- Design and development of Multipurpose Land rover in IEEE explore.

- Design and development of Fastest Line Follower Robot using QTR Sensor in IJSRD.



Team Otus

About Team:

The year 2022-23 marked a significant era for our club, Team Otus. The inauguration ceremony was a momentous occasion that etched itself in our memory. Mr. A.S. Koushal, from the Department of Mechanical Engineering, graced the event with his presence. He ignited a fire within us, a desire to not just build an electric go-kart, but a championship contender. We owe a debt of gratitude to the Department of Mechanical Engineering for believing in our vision and granting us the platform to bring it to life. A special word of thanks for Dr. S.A. Sonawane (Head of Department), whose unwavering support has been our pillar of strength, and to Dr. S.V. Karmare (Faculty Advisor), who has guided us through every step of this journey. With their blessing and the shared dream of building a competitive electric go-kart, we are brimming with passion and are fuelled by the spirit of innovation.

Journey:

Our recruitment efforts bore fruitful results, yielding a team of 10 likeminded people, each pulsating with a shared passion for the electrifying world of go-karts. United by this passion, we embarked on a collaborative journey.

Beginning with, the chassis the very backbone of our creation, demanded meticulous attention. We commenced with a prototype fashioned from PVC pipes, rigorously analysing its dynamics and performance. Following this initial exploration, we transitioned to a more robust mild steel structure, ensuring optimal strength and stability.

Next, our quest for knowledge delved into the intricacies of various battery types. We carefully evaluated factors like capacity, weight and discharge rate, ultimately selecting the most suitable option to power our electric kart.



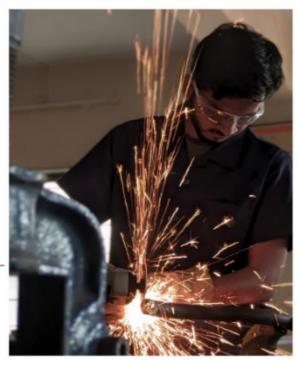
Our unwavering dedication attracted the backing of two esteemed sponsors: Progressive Civil Construction Company Pvt. Ltd (Mega Sponsor) and Maharaja Shree Industrial Solutions (Silver Sponsor). Their invaluable support uplifted our morale and empowered us to pursue our vision with renewed strength.

Our aspiration is to compete in prestigious electric go-kart events like the Indian Karting Championship and the All India Karting Championship. These platforms will challenge us against tough competitors, refining our creation for peak performance. We are confident that our thorough preparation and unwavering collaboration will equip us to tackle any unforeseen challenges that may arise on our journey. We stand united as a cohesive unit driven by innovation and fuelled by an insatiable thirst for success. The future beckons, we the members of Team Otus, are ready to embrace it with unwavering determination and an unyielding spirit.

Inauguration of Otus Lab







Manufacturing the Go-Cart components

Hackathon Club

Introduction:

1. Recruitment And Main Focus

As Focusing to our aims, we have Recruited more than 3 students from third year initially and then 12 of Second Year and 7 from First Year and they are Currently in a training Phase with DSA in Java C++ as well as Web development, Generative AI and mainly Python for First year students

2. Mission

The main aim of the club is to develop coding skills, teamwork, as well as communication skills among the students.

3. Goal

The Goal of the club was to train the students and participate in various coding competitions such as ACM, ICPC, TCS Code Vita. The Main goal was to Participate in the Smart India hackathon 2023.

4. Capacity

30 members Capacity with 7 FE, 12 SE, 6 TE, 5 BE Members Given in below list.



Activities and Initiatives

Regular Meetings

Meeting in the club is arranged by the club leader once in a week so that core team members examine the current work and give particular tasks to the members.

Mainly the Club members those aren't consistent are given warning as well as are handled by the clubs Core team members and leader

• Hackathon Events

1. We organised a Hackathon Competition in Hackathon Club in January 2023 with association with TYZER.PVT.LTD Company which was based on Python Open CV at Institute level in which our Club's 3 teams participated and each team got a prize money out of 7 registered teams.

2. We arranged an internal hackathon for smart India hackathon 2023 and have great response over 32 team registered and Top 3 teams were listed down by the Judges I which out of two teams 1 teams was at 2nd spot.

3. Our Club also arranged the Aptitude competition and winners were decided individually and 1 club member secured the 2nd prize in that too.

4. Internal hackathon Competitions between Club members.

Courses

1. DSA in Java and C++ by Apna College site and Code help

- 2. Generative AI from the Coursera.
- 3. Web Development from Code help
- 4. Python 100 days Bootcamp.

Are some of the courses provided by Club



Image: Aptitude test September 2023



Image: Guiding students about the Projects during the Ganesh Utsav 2023

Skill Development Initatives

Python

The Members of the First year are been trained with the Python language for their basic to advance development of coding language and problem-solving skills

Data Structures and Algorithms

Members associated with the club are compulsorily attached to learn and develop their skills with the DSA in C++ and Java

Leetcode / Hackerrank problems are given to them for solving and building their skill purpose



Web-Development

• In this Course the HTML, CSS, JAVASCRIPT, MERN STACK Industrial projects are also covered so that the Full stack web development ready members are found in our Club

•

Artificial Intelligence

- In this the Generative-AI is mostly focused and built many projects with this course
- Python is main language use here
- Use of API, Streamlit, etc are been used and create the projects.

Our Projects in 2023

1.Random Password Generator

This project has been created by the club members and is referred by the juniors too for their skill development. It's totally based on the Python language.

2. Chat-Gpt Clone

With the use of the Generative AI and prompt engineering concepts the members of the Club with 4 members team created the project called Chat-Gpt Clone and was one of the toughest and interesting projects created by Club With the help of python, Html CSS, JavaScript and Open AI's API-key

3. Restraurant Name Generator

With the help of the Generative-AI concept we created the project in which the website totally was created by the Streamlit and Open AI key was in use

4.Chat with Own PDF

With the help of the Python streamlit and Open AI key we have created the project named PDF_GPT where we upload the pdf and after that we can ask any question to it and it answers with reference to the PDF uploaded.

5. Offline LLM for Summarisation

It was the SIH 2023 project in which with the use of Offline LLM we can upload the PDF and summarize it in offline mode.

6. Websites We have created a website of our own Club with the help of the HTML CSS JAVASCRIPT and displayed on the Git-hub: https://hackathonclub.github.io/

Our Next Goal in Year 2024

- 1. Android development
- 2. Freelancing
- 3. Maximum coding competitions participation in 2024
- 4. Resume building workshop
- 5. To provide the internships through club
- 6. Data science course

Enlectic Research Centre

Introduction

In the ever-evolving landscape of technology, the Enlectic Research Centre (ERC) stands as a beacon of innovation and collaboration, uniting students from diverse disciplines. This report delves into ERC's visionary pursuits, its inclusive focus areas, and the impressive journey of its members, who represent a myriad of academic backgrounds.

Vision

ERC's vision extends beyond traditional academic boundaries. It aspires to be a dynamic community where students from various disciplines converge, not only mastering technical skills but also cultivating an entrepreneurial mindset. The centre is committed to fostering an inclusive, multidisciplinary approach, preparing its diverse members to thrive in the dynamic technology industry.

Inclusive Focus Areas

1. Web Development

Members from diverse disciplines collaborate on cutting-edge web development projects, utilizing the latest technologies to create inclusive, user-friendly websites that cater to a broad audience.

2. Android Development

ERC places a robust emphasis on mobile application development for the Android platform, encouraging students from different backgrounds to contribute their unique perspectives to projects that address real-world challenges.

3. Business Modelling

Recognizing the power of diverse insights, ERC members from various disciplines actively participate in crafting and refining business models, exploring monetization strategies, and gaining a nuanced understanding of market dynamics.

4. Cybersecurity

In response to the universal importance of cybersecurity, ERC engages members from all disciplines in activities that enhance their understanding of security principles, ethical hacking, and secure coding practices, fostering a collective commitment to digital safety.

5. AI/ML (Artificial Intelligence/Machine Learning)

ERC's commitment to staying at the forefront of technological advancements includes a focus on AI/ML. Members collaborate on projects that explore the potential of artificial intelligence and machine learning, pushing the boundaries of innovation in this rapidly evolving field.

6. Competitive Coding

Recognizing the significance of honing problem-solving skills, ERC actively promotes competitive coding among its members. Teams, deliberately formed with diverse backgrounds, participate in coding competitions, showcasing the centre's dedication to fostering collaboration, innovation, and excellence across disciplines.

Participation in Competitions

ERC's commitment to inclusivity extends to its active participation in coding and business model competitions. Teams are intentionally formed with members from diverse backgrounds, showcasing the centre's dedication to fostering collaboration, innovation, and excellence

across disciplines.

1) I2I 2022 Project Name: Your Ecofriendly life

Team Members: 1) Pranav Patil 2) Prashant Dhole 3) Shantanu Paturkar 4) Sampada Gunjal 5) Harshada Kangude

2) Shooting Stars Hackthon 2022 Project Name: Smart Waste Sorting Model Qualified For Second Round Team Members:
1) Pradnaya Kulkarni
2) Sakshi Galbale
3) Snehal Tirpude
4) Mansi Kothale

Conclusion

Enlectic Research Centre stands at the forefront of inclusive education and collaborative innovation. By welcoming students from various disciplines, ERC not only enriches its community but also prepares its members for the interdisciplinary nature of the tech industry. As ERC members continue to excel in competitions, they exemplify the ethos of diversity, collaboration, and adaptability that defines the future leaders of technology. The inclusive legacy of ERC lies not just in its technical achievements but in its commitment to shaping a new generation of trailblazers from diverse academic backgrounds in the world of technology.



ART SECTION

Zenith 2022-2023

Paintings



- Varad Laxman Kendre FE CIVIL



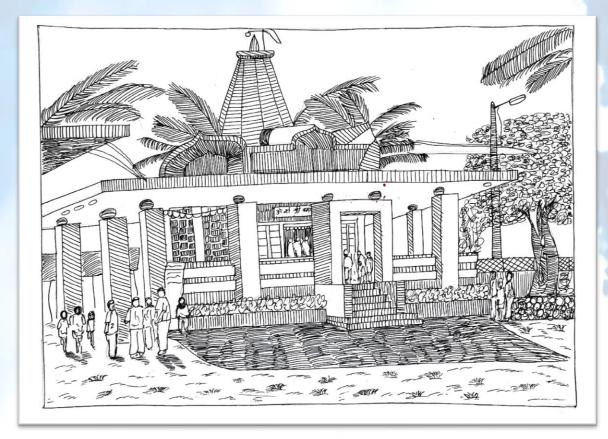


- Uttkarsh Chavan BE COMPUTER



- Varad Laxman Kendre FE CIVIL

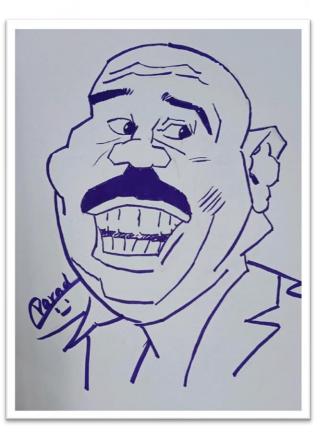
Sketches



- Prasanna Anil Bhandare FE EnTC

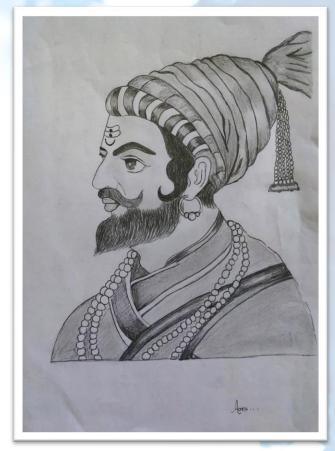
(Caricature)

- Varad Laxman Kendre FE Civil





- Aniket Koli TE COMPUTER



- Arti Jagtap TE COMPUTER



- Arti Jagtap TE COMPUTER



- Aniket Koli TE COMPUTER

Zenith 2022-2023

Photography



- Pranjal Waghmode SE Civil 29





- Chaitanya Mate BE Computer 2024







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- Pranjal Waghmode SE Civil

Poems

जिद्द

तू एकदा लढून तर बघ, हारला तर अनुभव मिळेल, जिंकला तर लढण्याची उम्मेद मिळेल.

फक्त तू थांबू नको, अडचणींना टाळू नको.

तू जगाला लाख फसवशील, पण मनाला काय सांगशील?

तुझ्यात जिद्व आहे लढण्याची, आकांक्षा आहे स्वतःला सिद्ध करण्याची.

मग घाबरतोस कशाला? या आयुष्याच्या वाटेवर गोंधळतोस कशाला?

दाखवून दे आज सर्वांना, तू चंद्र आहेस तारा नाही, तू आग आहेस निखारा नाही.

- धनंजय कळमकर FE Instrumentation

Date:) 1 college -life college - Knowledge करताना साथुष्य जगायला मिळाल खार जहा करम ससत हे college ता येअन कलातं. canteen at JET HED साखर घोडी कमी असली तरी मित्र-मेंत्रिणी त्यात भोडवा आणतात. जेवताना एक द्यास बमी का खाल्ला हे फक्त college रोच मित्र-मेंत्रिवी नावातात college मह्ये पाछल राकतान्य Brain; Auto Noise concellation mode as TIT जनान भानन बाहत लाही ओ। इतक मन उध रमून जात. READ MOLIVATION HID जिगरी यारांच free seg suggestion फक्त college महबेच असतः Late analiar punishment alertai भुख जगात कुठेच नसमं. college न्य आयुष्य हे असन्य अस्तं भहसा भुख इंशच- मिचत असत मे जगायला पुरत जयतं पठा जगठयाला पुरेसं असतं. Protiksha Ramesh Gophane BECOMP

स्वातंत्र्य दिन

शुरवीरांची श्रृंखला इथे, पराक्रमाची गाथा आहे, सांडले रक्त जिथे विरानी, पवीत्र अशी ती धरती आहे.

बाले किल्ल्यांचे नगर हे, शिवरायांचे राज्य आहे. सुर्य घेतो भगवी शाल जिथे, मुजरा त्याचा राजेंना आहे.

अनेकता, विवीधता,परंपरा . संगम तिन नद्यांचा आहे, सह्याद्रीच्या कुशीत या, पोवाडा गाथेचा आहे.

साजरा करू दिवस हा, सन स्वातंत्र्याचा आहे, तिन रंगामध्ये ही शोभला जो, रंग माझ्या भगव्याचा आहे

- सुजाता बिरादार TE Instrumentation & Control

Zenith 2022-2023

सुरुवात

पेटू दे आसमंत सारा, आता माघार तू घेऊ नको. घेऊन आदर्श मावळ्यांचा, झुंज तू थांबू नको. एक दिवस येईल तुझा, धीर तू सोडू नको. घेऊन ज्योत आकांक्षाशी, अंधार तू दूर कर. या अडचणींच्या थंडीमध्ये, तुझ्या विजयांचा जाळ कर. संकट खूप येतील, तू फक्त थांबू नको. या जिंदगीच्या युद्धामध्ये, तू काही वाकू नको. घाबरणाऱ्या विचारांना, थारा तू देऊ नको. विश्वास ठेव प्रयत्नांवर, तेच तुला बळ देतील. तू एकदा सुरुवात कर, तुझी जिद्वंच तुला ओळख देतील. तुझ्या यशाला थोडा वेळ लागेल, पण तूझं व्यक्तिमत्त्वंच एक प्रेरणा बनेल.

- धनंजय कळमकर. FE Instrumentation & Control

कलाकाराची व्यथा

रंग मंचापुरता मर्यादीत नाही मी.. बेरंग व्यथा माझी ही आहे.. कलाकार आहे मी कथेपुरता.. गोष्ट वेगळी एक ,माझी हि आहे..

आज झालो जरी मी धनी शब्दांचा.. हसु ते माझे क्षनीक आहे.. पडद्यामागे एकटा मी.. गोष्ट वेगळी एक ,माझी हि आहे..

आज घेतला वसा सत्याचा.. तो एक माझा सोहळा आहे.. भुमिका संपली ती आजची.. गोष्ट वेगळी एक ,माझी हि आहे..

समाधान प्रेक्षकांचे मुल्य आमचे. जन्माला जाणारे तें जनु कर्मफळ वाटे.. गोडवा पण आमचा मंचापुरता.. गोष्ट वेगळी एक ,माझी हि आहे..

कला म्हणजे मंदिर आमुचे.. येते पूजा नीत्यनेमाने आमच्या वाटे.. पण का ते मंदिर रिकामे भासत आहे.. गोष्ट वेगळी एक ,माझी हि आहे.

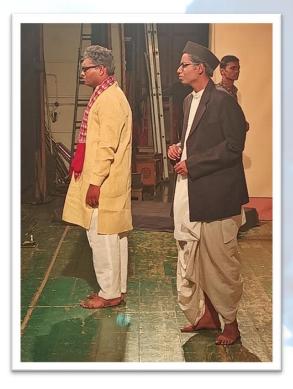
- सुजाता बिरादार TE Instrumentation & Control

Zenith 2022-2023

ललित लेखन

रंगभूमी परकाया प्रवेशाची अनुभूती देते..! आणि तोच प्रवेश जर चितळे मास्तरांचा असेल तर... मास्तरांना इतक्या जवळून अनुभवता आलं की अप्रत्यक्षरीत्या भरपूर काही शिकलो.

पुलं बद्दल जेवढं लिहावं तेवढं कमीच आहे ! चितळे मास्तरांसारखं पात्र जगण्याची संधी मिळाली हेच भाग्य...! पुलं त्यांच्या कथाकथनात म्हणतात, मास्तरांनी मला शिकवलं, माझ्या काकांनाही शिकवलं आणि आता माझ्या पुतण्यालाही शिकवत आहेत! शिक्षणाला एवढा वाहून घेतलेला मास्तर क्वचितच. प्रत्येक विद्यार्थी वेगळा आहे, त्याचं काहीतरी वेगळं स्थान आहे आणि वेगळं महत्व आहे, या मताचे मास्तर... ते जेव्हा वर्गात शिरत असत, तेव्हा एका हातात नेहमी पुस्तकं आणि तीही खांद्यावर घेतलेली नाहीतर कधी बंदुकीसारखा भारताचा नकाशा खांद्यावर घेऊन वर्गात शिरत असत...



त्यांची बोलण्याची पद्धत, वागण्याची पद्धत, विद्यार्थ्यांवरचं निःस्वार्थी अफाट प्रेम, शिकवण्याची तळमळ... या सगळ्या गोष्टी विद्यार्थांना खूप जवळच्या वाटे...

या सगळ्या गोष्टींचा अभ्यास करताना; मास्तरांना समजून घेताना बरेच स्वतःचेही अन्वय लागले ज्यांनी अभिनयाकडे, भाषेकडे बघण्याचा दृष्टिकोनच बदलला. त्यांच्या सारखं व्यक्त होणं, बोलणं, प्रत्येक परिस्थितीत शांत राहणं, विचार कौशल्य, देहबोली, बोलण्याची ढब, यात आपण स्वतः ला कसं ओतून घेतो, कसं सगळं आत्मसात करतो याची ही परीक्षा होती. संपूर्ण नवरसांचा संगम असणारं हे पात्र अचाट ज्ञानाचं आणि विचारशक्तिंचं स्त्रोत होतं... राग, आपुलकी, विट, प्रेम, उदासीनता, खिन्नता, आश्चर्य, भीती, साहस अशा कित्येक भावनांना मास्तरांच्या रूपातून बघता आलं...

प्रत्येक व्यक्ती ज्या काही प्रकारे व्यक्त होत असते त्यामागे भरपूर काही गोष्टी कारणीभूत असतात, त्याने जगलेला काळ, सुप्त इच्छा, कशाचीतरी धडपड, इतरांबद्दलचे विचार, मतं, इतरांमुळे स्वतः च्या आयुष्यात झालेले नकळत बदल, न व्यक्त होता आलेले क्षण, राग - लोभ, माणुसकी, गोष्टींबद्दलचा विश्वास आणि तिरस्कार, आनंद... अशा अनेक प्रसंगांमधून त्या व्यक्तीची व्यक्त होण्याची पद्धत आपसूकच ठरत असते, बदलत असते... या गोष्टींचा विचार करून मास्तरांबद्दल जेवढं काही ऐकलं होतं, वाचलं होतं, पाहिलं होतं त्यावरून माझीही भूमिका जिवंत होताना बधितली... कदाचित त्यात थोडं देवव्रतत्वही मिसळलं गेलं असेल...

एखादं पात्र आपलंस वाटतं, ते अंगात भिनवतो, गोंजारतो, त्याच्या वर निष्ठा ठेवतो, अशावेळी रंगदेवताच स्वतःच्या ओच्यातून काहीतरी काढून देत असावी, नाही का... या पात्रासाठी, या नाटकासाठी पू. लं. चा आशीर्वाद कायम सोबत आहे असं वाटतं, त्यामुळे आपल्या प्रयोगाबद्दलचं समाधान काय असतं हे जाणवलं... विंगेत उभं राहून आपल्या प्रवेशाचा वाट पाहण्याचा क्षण कदाचित खूप मोठा वाटत असावा कुणाला, पण एकदा प्रवेश घेऊन सगळ्या आवेशात काम करताना दिसतो तो फक्त काळोख, कलेला उजाळा देणारा; सगळा रंगमंच भारावून टाकण्याची आपल्यात



ताकद येते ती या रंगभूमी मुळेच... आणि यात पू. लं. चं साहित्य प्रत्येकाच्या जगण्यात उर्मी आणतंय, कलेच्या प्रत्येक क्षेत्रात कलाकारांना नकळतपणे बरचं काही देतंय, यासाठी त्यांचे आपण सदैव ऋणी असू...!!

- देवव्रत बंडाळे

TE Instrumentation

THE DEPARTMENT REPORT

Department of Applied Science

Applied Sciences Department bridges a gap between basic sciences and engineering technology. This department takes care of First year as well as second year engineering subjects like Engineering Mathematics I, II and III, Engineering Physics, Engineering chemistry, Environmental studies I, Environmental Studies II, Democracy Election and Governance, Physical Education and Soft Skills/Employability Skills Development.

The department has total 06 full time teaching faculties:

• Dr. U. S. Kakade

Associate Professor in Physics as well as Head of Department and First Year Coordinator. He also works as a Member of College Development Committee as per Maharashtra University Act, 2016, In-charge of ARC and In Charge Change of Branch Committee after First Year.

• Smt. H. H. Rakshe

Assistant Professor in Mathematics. She also member of Women Grievances Redressal Committee. First year co-ordinator.

Training -

1) "Artificial Intelligence and Machine Learning" Faculty Development Programme National Directorate of Technical Education, Maharashtra 08/03/22 to 12/03/22.

• Dr. Smt. P. V. Damre

Assistant Professor in Chemistry. She also works as Assistant Programme Officer of NSS, NBA coordinator for Engineering Chemistry, Chemistry laboratory in charge, Class Teacher First Year Electronics and Telecommunication, Mentor for First year Mechanical Batch students (M3 Batch)

Training-

One Week FDP on "Tools & Techniques in Characterization of Compounds" organized by CSIR-CERI, KARAIKUDI, during January 17-21, 2022.

• Smt. Y. N. Chaudhari

Assistant Professor in Physics. Member of Women Grievances Redressal Committee, student welfare cell, TATA Samarth Scholarship, CSR and student aid activities. Also taken the exam of Spoken tutorial for FE students. Worked as member in women's harassment and redressal committee. Presented poster at RMC, Savitribai Phule Pune University, Pune.

Dr. M. D. Panchal

Assistant Professor in English. He also works as Programme Officer of NSS, at the institute level. He has also worked as a member of Covid-19 vaccination committee of this institute under 'Mission Yuva Swastha'. He is a member of Gender Equality Cell, Students' Development Committee and Anti-Ragging Committee of this institute. In the early half of this academic year, he had also worked as Boys' Hostel Rector and In-charge Coordinator of Covid-19 Care Centre functioning at college hostels.

He has worked as an In-charge of cleanliness drives conducted at Applied Sciences Department under Swatantryacha Amrut Mahotsav. He is also In-charge of Language Laboratory of the department. He also looks after departmental NPTEL/MOOCs activities. He has received Corona Warriors Appreciation Certificate from National Service Scheme Department of Savitribai Phule Pune University, Pune for his dedicated service towards Covid-19 awareness programmes and for conducting various activities during pandemic for welfare of the masses. He is a Life Member of The Indian Society for Technical Education (ISTE). In this academic year, he has successfully completed One week FDP on Enhancing Soft Skills and Personality jointly conducted by NPTEL and AICTE. He has also successfully completed All Eight Modules of National Initiative for Technical Teachers

Training (NITTT)-

A Comprehensive Training Policy for Technical Teachers under the initiative of AICTE.

• Shri. V. P. Jadhav

Assistant Professor in Chemistry. He also works as a Member of Water Supply and First Year Coordination Committee. First year Time table in charge, Class Teacher First Year CIVIL, Departmental Library Coordinator, NBA coordinator for Environmental Studies - I and Environmental Studies- II subject, Mentor for First year Instrumentation Batch students (13 Batch). Also handled implementation of First year Physical Education Scheme.

Training-

One week FDP on Basics of Fluorescence Spectroscopy, Organized by NPTEL-AICTE, during Jan-Mar-2022.

Department of Automobile Engineering

About Department

The department of Automobile Engineering was started in the academic year 2009-10. For ten years we have been striving for continuous development of our department and with that effort now the department is having fully equipped Laboratories with almost all Teaching resources, also higher qualified Teaching and non-Teaching staff. The department is committed for overall development of students which will help them to achieve the top position of their career.

Department Vision

"To develop proficient automobile engineers for sustainable development."

Department Mission

M 1: To impart application-oriented education with creative thinking and human values.

M 2: To develop Automotive Technological skills of the students for enhancing the employability and entrepreneurship.

M 3: To prepare the students for higher studies, research and innovation.

M 4: Develop the graduate engineers for continual learning to serve the society.

Program Educational Objectives (PEOs)

PEO1: Be successful in a career with a sound knowledge of basic fundamentals of mathematics,

engineering sciences and engineering.

PEO2: Develop the ability to solve real time engineering problems using core knowledge of automobile engineering.

PEO3: Developing the inter-disciplinary skills and professional ethics to analyzex and solve the engineering issues towards sustainable development.

PEO4: Build up interpersonal skills, leadership, and team spirit and entrepreneurship qualities for a successful profession along with life-long learning.



List of Teaching Staff

Sr. No.	Name of the faculty	Designation	Qualification	Date of joining
1	Dr. M. J. Pable	Associate Professor and Head of the Department	Ph.D. Optimization of Passive SuspensionsM.E. / M.Tech. Machine DesignB.E./B.Tech (Mechanical)	25/08/2016
2	Prof. V. Y. Dhepe	Assistant Professor	M.E. (Mechanical- Heat Power)	13/10/2016
3	Prof. K. B. Bansode	Assistant Professor	M.Tech (Design of Machine Element)	
4	Prof. R. P. Kakde	Assistant Professor	M.Tech (Thermal & Fluid Science)	30/09/2016
5	Prof. A. J. Bhosale	Assistant Professor	M.Tech (Automotive Engineering)	30/09/20216
6	Prof. S. D. Patil	Assistant Professor	M.Tech. (CAD/CAM)	04/10/2016
7	Prof. D. S. Lengare	Assistant Professor	M.Tech (Design)	04/10/2016
8	Prof. P. B. Pimpalkar	Assistant Professor	M.Tech (CAD/CAM)	14/10/2016
9	Prof. R. B. Teltumbade	Assistant Professor	M.Tech (CAD/CAM)	16/12/2016



List of Nonteaching Staff

Sr. No.	Name of the faculty	Designation	Qualification	Date of joining
1	Smt. K. P. Ubale	Instructor (T.L.A.)	B.E. Electronics Engg.	07/06/2019
2	Smt. M. V. Deshpande	Instructor (T.L.A.)	Diploma in E&TC	13/08/2021
3	Smt. R. K. Dawane	Instructor (T.L.A.)	Diploma in Metallurgy	02/05/2015
4	Shri. S. S. Bhong	Auto technician	Diploma in Automobile	07/03/2014
5	Shri. R. S. Warghat	Auto technician	Diploma in Automobile	07/03/2014
6	Shri. G. A. Shaikh	Instructor (T.L.A.)	Diploma in Mechanical	01/09/2009
7	Smt. S. N. Gutte	Laboratory Attendant	B.A.	01/06/2015
8	Mr. Rokade	Laboratory Attendant	9th	20/12/2022
9	Smt. A. Kadam	Laboratory Attendant	S.S.C.	09/06/2023

Number of students admitted in the department for A.Y. 2022-2023

Intake	SE	TE	BE
Total No of students	76	80	79
No of Girls	12	13	23
No of Boys	64	67	56



Details of Laboratories in the Department

Sr. No.	Name of Laboratory	Area	Total Cost of Equipment	Name of Lab In charge	Name of Lab Assistant
1	CAD CAM Lab	231sq.m	3488368/-	Dr. M. J. Pable	Smt. K. P. Ubale
2	Metrology & Quality Control	106sq.m	891970/-	Prof.P.B.Pimpalkar	Smt. R. K. Dawane
3	Automotive Transmission	102sq.m	165848/-	Prof. Arvind J. Bhosale	Shri. R. S. Warghat
4	Automotive Electrical & Electronics	216sq.m	431353/-	Prof. Arvind J. Bhosale	Shri. S. S. Bhong
5	Automotive Refrigeration & Air Conditioning	98sq.m	128105/-	Prof. V. Y, Dhepe	Shri. G. A. Shaikh
6	A) Theory of Machine(B) Machine & VehicleDynamics	102sq.m	240009/-	Prof. D. S. Lengare	Smt. R. K. Dawane
7	(A)Automotive Systems& Testing(B)Vehicle Maintenance& Garage Practices	273sq.m	735245/-	Prof. Arvind J. Bhosale	Shri. R. S. Warghat
8	Internal Combustion Engine	100sq.m	1704446/-	Prof. Ravi Prabhakar Kakde	Shri. S. S. Bhong
9	Seminar Hall	231sq.m	41819/-	Prof. R.B.Teltumbade	-
10	Systems In Mechanical Engineering	102sq.m	84855/-	Prof. K.B.Bansode	Shri. S. S. Bhong
11	Project Lab & Motor Sport Lab	273sq.m	2 De	Prof. Ravi Prabhakar Kakde	Shri. R. S. Warghat

Details of Industrial Visit Arranged for the students

Sr. No.	Date	Subject	Class	Name of Industry
1	11/11/2022	Digital Manufacturing Laboratory	TE	 Rudra Industries Laser Cutting Services Chikhali Pune -411062 Nimako Industries Chikhali Pimpri Chinchwad Pune Bhau Institute (COEP)

Details of Seminar / Expert talk, organized by department / faculties for students

Sr.	Name of the	Name of the	Title of Seminar/ Expert	Period	Number of
No.	faculty	Expert	Lecture		participants
1	Prof. P.B. Pimpalkar	Mrs. Kanchan Auti	Expert Lecture on Soft Skill Development	03/12/2022	72

Details of STTP / FDP / NPTEL Courses / Workshop / Seminar / Webinar Attended by Faculties

Sr. No.	Name of the faculty	Title of STTP / FDP	Organizing Institute	Type of FDP /STTP	Duration with dates
1	Prof. Lengare D. S.	MATLAB Programming	MNIT Jaipur, NIT Patna, IIITDM Jabalpur	Online	22/08/2022 to 2/9/2022 (2 weeks)
2	Prof. Lengare D. S.	Research & Publication Ethics	SPPU Pune	Online	1/3/2023 to 31/03/2023 (1 Month)



3	Prof. Arvind J. Bhosale	FDP on Industry led Innovation and Cutting Edge Technologies	MSFDA, Pune and Vishwakarma University, Pune	Offline	11/09/2023 to 15/09/2023 (1 Week)
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Details of Industrial Training / Training Attended by Faculties

Sr. No.	Name of the faculty	Name of Industrial Training	Duration
1	Prof. Arvind J. Bhosale	Machine Learning with Python	31 July to 17 August 2023
2	Prof. Arvind J. BhosaleAI, Machine Learning, Deep Learning, Computer Vision NLP and ChatGPT with Python		21 August to 19 September 2023

Paper published/Presented by Faculty in International/ National Journals and conference

Sr. No.	Name of the faculty	Title of Paper	Name of Journal/Conference	Date of publication
1	V.R. Shinge, M.J. Pable	Effect of nano-minimum quantity lubrication on cutting temperature and surface roughness of milling AISI D3 tool steel	Materials Today: Proceedings 72(2023)	2023
2	Prof. Lengare D. S., Dr. D. R. Pangavhane	Review on parameters affecting chatter in thin plates	RAMMML-2023	2023
3	Prof. Arvind J. Bhosale, Vaibhav N. Deshmukh	Efficient ways of thermal management of an EV battery	Materials Today: Proceedings 72(2023) 1434–1445	27th September 2023

	Prof. Kakde R, Nimje P.	Studying Modern Formula 1 Front Wing at Low Cornering Speeds	AJMT-VOL. 3 NO. 2 (2023): Paper No.: 023-DF- 02 543-574	30-06-2023
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Students Activities

List of Class Representatives

Sr. No.	Class	Name of CR
1	BE	Jitendra Prajapati
2	TE	Balkrishna Pawar
3	SE	Samrudha Bugade

Academic Achievement

Sr. No.	Name of Students	Class	Year	CGPA/SGPA
1	DESHMUKH HARSH NAGESHWAR	BE	FIRST TOPPER	9.25
	BHOPLE AYUSH CHANDRASHEKHAR		SECOND TOPPER	9.19
	GOTMARE ANIKET DNYANESHWAR		THIRD TOPPER	9.11
2	PATIL KHUSHAL RAVINDRA	TE	FIRST TOPPER	9.21
	REURE PRATHAM SHIVSHARAN		SECOND TOPPER	9.07
	KUMBHAR POONAM SANTOSH		THIRD TOPPER	8.98
3	LAMKHEDE SANKEET	SE	FIRST TOPPER	7.27
	RAHANGADALE SAKSHI		SECOND TOPPER	7.25
	SAMRUDDHA BUGADE		THIRD TOPPER	7.23

Sr. No.	Name of students	Name of company	СТС
1	Abhishek Pandey	Magna Automotive India Pvt. Ltd.	3.75
2	Girish Babasaheb Gadage	Magna Automotive India Pvt. Ltd.	3.75
3	Omkar Dnyaneshwar Sudke	Magna Automotive India Pvt. Ltd.	3.75
4	Pranjali Anil Lade	Magna Automotive India Pvt. Ltd.	3.75
5	Akash Sopan Kolhe	MSKH Seating Systems	2.16
6	Akshay Navnath Ghugarkar	MSKH Seating Systems	2.16
7	Ankitkumar Moreshwar Landge	MSKH Seating Systems	2.16
8	Ashish Anilkumar Kharatmul	MSKH Seating Systems	2.16
9	Ayush Chandrashekhar Bhople	MSKH Seating Systems	2.16
10	Gotmare Aniket Dnyaneshwar	MSKH Seating Systems	2.16
11	Jadhav Sonali Ramnath	MSKH Seating Systems	2.16
12	Kothale Avkash Suresh	MSKH Seating Systems	2.16
13	Madhuri Anil Khaire	MSKH Seating Systems	2.16
14	Sagar Kamlakar Khairnar	MSKH Seating Systems	2.16
15	Vipul Bhagwat	MSKH Seating Systems	2.16
16	Ajay Vilas Jadhav	TCSL Ninja	3.36
17	Virbhadra Virsang Pandharpure	TCSL Ninja	3.36



Sr. No.	Name of Student	Class	Selected Post
1	Akshay Ghugarkar	BE	President
2	Khushal Patil	TE	Vice-President
3	Shubhangi Shinde	BE	Ladies Representative
4	Harsh Deshmukh	BE	Treasurer
5	Tejas Ubhedal	TE	Joint Treasurer
6	Aniket Gotmare	BE	Cultural Co-ordinator
7	Kunal Bisen	TE	Cultural Co-ordinator
8	Namrta Tapre	TE	Cultural Co-ordinator
9	Sumit Narale	BE	Sport Co-ordinator
10	Om Topale	TE	Magazine and newsletter Co-ordinator
11	Anushka Singh	TE	Magazine and newsletter Co-ordinator
12	Omkar Sudake	BE	Event Co-ordinator
13	Yash Godase	TE	Event Co-ordinator
14	Ankitkumar Landage	BE	Discipline Co-ordinator
15	Pratham Gaikwad	TE	Discipline Co-ordinator
16	Poonam Kumbhar	TE	General Co-ordinator

Details of Automobile Engineering student Association for A. Y. 2022-23

Details of Spoken Tutorial

Sr. No.	Class	Number of Students	Courses Offered	Total Number of Passed students	Date of Exam
1	BE	95	LaTeX	95 (100%)	June 23, 2023
2	TE	66	LaTeX	66 (100%)	June 24, 2023
3	SE	39	QCad	39 (100%)	<i>y</i>

4	BE	74	OpenFOAM version 7	74 (100%)	03 Nov 2022
5	TE	44	OpenFOAM version 7	44 (100%)	04 Nov 2022

Extra-curricular activities

Students of the department are not only having Academic Excellence but also participated in National level technical events like BAJA, GO KART, Electric two-wheeler Design Competition and ROBOCON. Details of student's participation in various events for Academic Year 2022-23 are tabulated as follows.

Sr. No.	Title of Activity	Date of conduct	No. of Students	Organized by	Rank
1	Go Kart	2/02/2023	25	Formula Karting Racing Championship	Lightest Vehicle Award
2	Go Kart	17/02/2023	25	Indian Karting Championship	Virtual Round AIR-3 Overall Rank AIR-5 Best Acceleration Award
3	SAE Supra	13/7/2023	25	SAE	Best Endurance Award
4	E-Bike	22/07/2023	10	ETWDC (SAE Electric two- wheeler design competition)	Best Endurance Award



Department of Civil Engineering

About Department

The department of Civil Engineering is established in AY 2009-10 with intake of 60+15 others. Academic of the department for the students is completed by the faculty appointed by the MPSC with the support of visiting faculty appointed by the Principal. Department has 09 laboratories to cater the need of academics as per SPPU, Pune. Department arranges the site visits, expert talks, worksop/webinars/training, soft skill development programme, etc., to meet requirement of student and to make them competent civil engineer to cater the need of society.

Department motivates the students to take part in curricular, co-curricular and extracurricular activities and technical activities to make them grown up citizen to work for nation. These activities are like learning /certification of NPTLE courses, swayam, Spoken tutorial by IITB, ABINITIO a Technical event in the institute. Students are asked to participate in technical & non-technical activities arranged by the institute and other colleges in SPPU and other state of Maharashtra.

Faculties /staff are motivated to attend the workshops/seminars/FDP/STTP to upgrade their knowledge to share with the students. Faculty works for the SPPU Pune for conduct of various examinations, Committees, paper assessment through CAP organised by the GCOEARA/SPPU, Pune. Departments aim in future to go for NBA accreditation after the criteria of faculty and infrastructure.

Department looks after the civil maintenance of buildings in the campus in association with the PWD and Grampanchyayat in the form of correspondence/communication with them. This maintenance includes following

- Annual maintenance of Sewage Treatment Plant (STP) of capacity 3MLD in the campus from agency appointed.
- Routine repairs and maintenance asked by the various departments, quarters and hostels, etc.
- Cleanliness in the campus / department to provide hygienic environment.

List of Faculties

Sr. No.	Name of faculty	Designation	Qualification	joined the Dept on
1	Dr. W. N. Deulkar	Associate Professor and	PhD in Civil Engg	21.11.2016
		Head		
2	Dr. S. N. Madhekar	Associate Professor	PhD in Civil Engg	17.8.2021
3	Dr. M. G. Shaikh	Associate Professor	PhD in Civil Engg	11.06.2019
4	Dr. S. B. Kharmale	Associate Professor	PhD in Civil Engg	05.04.2011
5	Dr. Hema Munot	Associate Professor	PhD in Civil Engg	01.08.2023

List of Supporting Staff

Sr.	Name	Designation	Qualification	Joined the dept on
No.				
1	Mr. S. S. Gurav	Technical Lab Assistant	Diploma in Com. Engg	05.07.2013
2	Mrs. A. D. Bhat	Technical Lab Assistant	Diploma in Civil Engg	07.08.2015
3	Mr. S. V. Bharambe	Technical Lab Assistant	BSc (Physics)	19.07.2019
4	Ms. S. B. Palve	Technical Lab Assistant	BE Computer	20.08.2021
5	Ms. S.M.Wadekar	Technical Lab Assistant	B.Sc.(Electronics)	11.11.2022
6	Mr. V.B. Wavhal	Technical Lab Assistant	DME	01.08.2023
7	Mr. P. K. Tak	Lab Attendant	HSC	27.03.2019
8	Mr. S.K.Gilbile	Lab Attendant	HSC	20.12.2022

No of Students in the Department for AY2022-23

Class	FE	SE	ТЕ	BE
Intake	60+15	60+15	60+15	60+15
No of students	55	72	76	90
No of girl student	17	24	23	25
No of boy student	38	48	53	65

Details of Major Laboratories in the Department

Sr.	Name of Laboratory	Area as per	Available	Cost of	Lab	Lab
No.		AICTE Sqm	areas sqm	Lab Rs.	Incharge	Assistant
1	Surveying	66	64.778	927172	S B Kharmale	A D Bhat
2	Environmental Engg	66	75.075	1012523	R P Thanedar	A D Bhat
3	Geotechnical Engg	66	153.3	576971	R P Thanedar	A D Bhat
4	Engineering Geology	66	64.778	222750	W N Deulkar	A D Bhat
5	Computer Engg	66	181.742	2244131	S B Kharmale	S B Palve
6	Engg Mechanics	66	60.28	106002	M G Shaikh	S B Palve
7	Fluid Mechanics	66	181.742	742483	S B Kharmale	S S Gurav
8	Transportation Engg	66	153.3	210137	R P Thanedar	S S Gurav
9	Concrete Technology + Consultancy	66	153.30	3089643	S B Kharmale	S S Gurav

List of Major Equipment's

Universal Testing Machine-100 Tone Capacity	Total Station
Compression Testing Machine -200 Tone Capacity	• Auto Levels with LC
Accelerated Curing Tank	• Digital Planimeter with LC
Rebound Hammer NDT Testing	• GPS System with LC
• UV Spectrophotometer	• Nautical Sextant with LC
• Direct Shear Test	• Turbulent Flow Apparatus
Unconfined Compression Test	Hydraulic Tilting Flume
• Filtration Assembly With Vacuum Pump	• Ductility Of Tar Test Apparatus
• Flame Photo Meter	Film Stripping
	Impact Of Jet On Vane

Details of Site Visit Arranged for the students

- Dr W N Deulkar organized the site visits for the students at RMC plants, Manchar to study the details of Concrete.
- Dr W N Deulkar organized the site For SE civil Students at Gelogy Museum at COEP, Pune on 8..11.2022
- Dr. M. G. Shaikh organized the visits for the SE-Civil students at MERI-Nashik to study the details of Concrete on date 16/05/2023
- Dr. S. B. Kharmale- Nil
- Dr W N Deulkar / Mr. R.S. Tiwari organized the visits for the BE-Civil students at RSCOE'S JSPM College Tathavade, Pune. to study the details of Earthquake Engg. on date 25/05/2023

Details of Seminar/webinar/expert talk, organized by department / faculty

- Dr S S Shahapure delivered expert talk for subject surveying of TE civil Engg students on 09.04.2022 organised by Dr W N Deulkar
- Shri. Pravin Mehetare delivered expert talk on topic "Ferrocrete Construction" under Concrete Technology Subject for SE students on 04.04.2022 organised by Dr W N Deulkar
- Shri. Nilesh K Jain delivered expert talk on topic "Recent Civil Engineering Materials" under Concrete Technology Subject for SE students on 21.05.2022.
- Dr W N Deulkar organized motivational and counselling speeches for students frequently on April 2023 to release the stress of the students, many more times.
- Organized and co-ordinated an expert talk on "life cycle manamnegment in civil engineering project " for civil engg students by pralhadr Rao from shanty computer and system, Mumbai on 14.09.2022

Faculty Achievements

1. Books Published:

- Dr W N Deulkar Published a book on "Structural Mechanics" with Nirali Prakashan.
- Dr W N Deulkar Published a book on "Concrete Technology" with Nirali Prakashan.
- Dr S. N. Madhekar Published a book on "Passive Vibration Control of Structures" with Taylor and Francis, USA.

2. Paper/ Journal Publication by Faculties:

Sr. No.	Faculty Name	Subject of Paper / Journal Published by Faculty	Organizer
1	S. N. Madhekar	Manisha V. Waghmare, Suhasini N. Madhekar and Vasant A. Matsagar, "Performance of RC elevated liquid storage tanks installed with semi-active pseudo-negative stiffness dampers", Journal of Structural Control and Health Monitoring wiley online library.com/journal/stc, 2022.	John Wiley & Sons, Ltd.
2	S. N. Madhekar	Prajakta Shete, Suhasini Madhekar, and Ahmad Fayeq Ghowsi. "Numerical Analysis of Steel Buckling-Restrained Braces with Varying Lengths, Gaps, and Stoppers". Practice Periodical on Structural Design and Construction, © ASCE, ISSN 1084-0680, Vol, 27(1): 04021051., 2022	American Society of Civil Engineers
3	Dr.S B Kharmale	1)Concrete Technology 2)Earthquake Engineering	International Journal

3. NPTL Course attended by Faculty and Students

- **a.** Dr. W. N. Deulkar had registered and successfully completed the NPTEL course on Soil Structure Interaction during Jan to April 2022 and but could not appear for examination.
- **b.** About 192 students of SE to BE had registered and successfully completed the NPTEL courses like QCad, Python 3.4.3 in AY 2022-23 as follows

4. STTP/FDPs Attended by Faculty

Sr. No.	Faculty Name	Type of FDP /STTP	Tile of FDP /STTP	Organizing Institute	Duration with dates
	Dr. W. N. Deulkar	5	National Conference on Energy and Environment for Sustainable Construction	GCOEAR, Awsari	5-6.07.22
	Dr. W. N. Deulkar		1		22.08- 05.09.22
3	Dr. W. N. Deulkar		Foundation training to the class I officers under Higher and Technical education	YASHADA, Pune	17.4.23 - 28.5.23

5. Training/ Workshop/Conference/Seminar/Webinar Attended by Faculty

Sr.	Name of	Details	Date		
No.	Faculty		0		
1.	Dr. W. N. Deulkar	Attended and presented the paper on "Plastic Formwork For Sustainable Construction" At National Conference on Energy and Environment For Sustainable Development (NCEESD-2022) organised by online workshop of GCOEAR, Awasari.	5-6 July 2022		
2.	Dr. W. N. Deulkar	NC17-Deulkar W. N. and S B Kharmale, (2022), "Comparison of Different Formwork", National Conference on Sustainable Material (NCSM-2022) organized by Government College of Engineering, and Research, Awasari. Pune Maharashtra, India, vol 1, ppon 5-6 July 2022	5-6 July 2022		
3.	Dr.S B Kharmale	NC17-Deulkar W. N. and S B Kharmale, (2022), "Comparison of Different Formwork", National Conference on Sustainable Material (NCSM-2022) organized by Government College of Engineering, and Research, Awasari. Pune Maharashtra, India, vol 1, ppon 5-6 July 2022			
4.	Dr. W. N. Deulkar	INJ14- Jyoti Chhagan Bhong and W N Deulkar,(2022), "A Comprehensive Review on the Hydraulic Conductivity of Geosynthetic Clay Liner", Engineering Science and Technology, an International Journal, (Science Direct), Submitted, Manuscript No JESTCH-D-22- 00168, Dec 2022	Dec 2022		

6. **R and D activities**

Sr. No.	Name of faculty	Details
1.	Dr. W. N. Deulkar	Guiding 04 candidates for their PhD under SPPU.
2.	Dr. S. B. Kharmale	Guiding 03 candidates for their PhD under SPPU.
3.	Dr. M. G. Shaikh	Submitted FDP proposal on "Need of Bamboo" to AICTE under ATAL scheme.
4.	S. N. Madhekar	Guiding 03 candidates for their PhD under SPPU.

Students Activities

1. List of Class Representatives

Class	SE	TE	BE
CR	Vishal Santosh Shinde	Abhishek Sanjay Tambe	Shruti Sanjay Kate

2. Annual Result by SPPU

S.N.	Class	SE	ТЕ	BE
1	All clear (%)	58.82% (40)	67.10% (51)	86.66% (78)
2	ATKT (%)	41.17% (28)	32.89% (25)	13.33% (12)
3	Total student	68	76	90

3. List of Class Toppers with CGPA

Class	Rank	Name of Student	SGPA/CGPA (Marks)	Class
	1 st	DHANSHREE SHASHIKUMAR DIKALE	7.75	First Class With Distinction
SE Civil	2 nd	DEVKATTE HARIDAS KALOJIRAO	7.73	First Class
	3 rd	SAURABH NAVNATH GIRME	7.64	First Class
	1 st	MASKE PRATIK NAMDEV	8.67	First Class With Distinction
TE Civil	2 nd	GAMBHIRE MADHAV DATTATRAY	8.55	First Class With Distinction
	3 rd	1] PATIL PRADNINI SURENDRA 2] TAMBE ABHISHEK SANJAY	8.33	First Class With Distinction
BE	1 st	PARALE UTKARSH VASANT	9.50	First Class With Distinction
Civil	2 nd	SHRUTI SANJAY KATE	9.35	First Class With Distinction
	3 rd	RASHIL PATYAL	9.17	First Class With Distinction

4. Details of Student representative at departmental & institute level for A. Y. 2022-23

Sr. No.	Name	Class	Mobile No.	Selected Post
1	Daga Shreya	BE Civil	9307597097	CESA President
2	Sonawane Pranita	BE Civil	9028753259	CESA Vice President

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3	Kamble Gayatri	TE Civil	8767158556	CESA Secretary
4	Zargad Abhishek	TE Civil	8329411478	CESA Treasurer
5	Dharade Devika	TE Civil	8591049358	Dept. Sports Secretary
6	Gaikwad Sakshi	TE Civil	7020141493	Dept. Cultural Secretary

5. Details of Curricular & Co-curricular Activities participation and Achievements -Academic Year -2022-2023

Sr • N 0.	Name of the student	Name of the event	Organised By	Prize Secure	Event Date	Class
1	Darpan Mokal	Green Concrete Mix Design	Indian Concrete Institute of Pune Centre in Asso. With AICTE & DTE & Convener of Anantrao Pawar COE & Research, Pune	National Level Competi tion - Participa tion	2022, Concrete Day & Engineer's Day	BE - Civil
2	Harshal Shinde	Green Concrete Mix Design	Indian Concrete Institute of Pune Centre in Asso. With AICTE& DTE & Convener of Anantrao Pawar COE & Research, Pune	National Level Competi tion - Participa tion	2022, Concrete Day & Engineer's Day	BE - Civil
3	Ashwini Raut	Green Concrete Mix Design	Indian Concrete Institute of Pune Centre in Asso. With AICTE& DTE & Convener of Anantrao Pawar COE & Research, Pune	National Level Competi tion - Participa tion	2022, Concrete Day & Engineer's Day	BE - Civil
4	Shreya Daga	Green Concrete Mix Design	Indian Concrete Institute of Pune Centre in Asso. With AICTE& DTE & Convener of Anantrao Pawar COE & Research, Pune	National Level Competi tion - Participa tion	2022, Concrete Day & Engineer's Day	BE - Civil
5	Trisha Warpe	Science & Technolog y for Rural Developm ent-2023	Samarth Group of Institutions College of Engineering, Belhe	Event Participa tion	19-Apr-23	SE- Civil
6	Sanika Salunkhe	Science & Technolog y for Rural Developm ent-2024	Samarth Group of Institutions College of Engineering, Belhe	Event Participa tion	20-Apr-23	SE- Civil

					Zenith 2	022-2023
7	Tithee Kulkarni	Science & Technolog y for Rural Developm ent-2025	Samarth Group of Institutions College of Engineering, Belhe	Event Participa tion	21-Apr-23	SE- Civil
8	Sanskruti Suryavanshi	Science & Technolog y for Rural Developm ent-2026	Samarth Group of Institutions College of Engineering, Belhe	Event Participa tion	22-Apr-23	SE- Civil
9	Pranjali Dilip Waghmode	Science & Technolog y for Rural Developm ent-2027	Samarth Group of Institutions College of Engineering, Belhe	Event Participa tion	23-Apr-23	SE- Civil
10	DhanaShri.Dikale	Science & Technolog y for Rural Developm ent-2028	Samarth Group of Institutions College of Engineering, Belhe	Event Participa tion	24-Apr-23	SE- Civil
11	Trisha Warpe	Vollyball- Girls	GCOEARA- COMBAT- 2023	WINNER	Apr-23	SE- Civil
12	Mohd.Musaddiq Shaikh	Vollyball- Girls	GCOEARA- COMBAT- 2024	WINNER	Apr-23	SE- Civil
13	Renuka Mali	Vollyball- Girls	GCOEARA- COMBAT- 2025	WINNER	Apr-23	SE- Civil
14	Harshal Barde	Sahyadri Formulla Racers - Supra Saeindia Student Forula- 2023	Buddh International Circuit Grater Noida	Participa	10th -13th July 2023	SE Civil

6. Details of Spoken Tutorial Courses offered by IIT, Bombay undertook of Civil Engineering Student

S N	Class	Courses Offered	Total student Participated	No of Students Passed / %result	Date of Exam.
1	SE Civil	Q-cad	70	65 (92.86 %)	15-12-2022
2	BE Civil	Python 3.4.3	66	61 (92.43 %)	10-11-2022
3	BE Civil	Python 3.4.3	82	66 (80.49 %)	10-11-2022

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Social Activities

1. Details of Testing and Consultancy

Department runs the Testing and Consultancy cell to cater the need of Civil Engineering Industry, in which civil engineering materials are tested and infrastructure is consulted. Different type of consulty undertaken are like TPQA of infrastructure, vetting of RCC drawing, Geotechnical investigation etc. Revenue generated is share with Government of Maharashtra development of laboratories & etc other. Approximately 10 to 15 lac revenue is generated by the department. Major Consultancy undertaken by departments is,

- 1. Third Party Audit of high mask pole installed by for Z P Pune at villages Manchar/Ambehgogn, District Pune
- 2. RCC drawing vetting & construction of ESR, GSR, Concrete Road, retaining walls, etc. for Nagarparishad, Junnar, Rajgurunagar, Ambegaon, Dist. Pune
- 3. Vetting of drawing of bridges for m/s vrs Patel Construct & CO, Pune.

2. Major Customers for the consultancy by the department are

Pooja electrical, Ahemednagar	Nagarparishad, Junnar,
• M/s V S Patel, Pune	Nagarparishad, Chakan,
• M/s Nirmal Solutions, Nashik	Nagarparishad, Rajgurunagar
Mangalmurti Construction, Khed, Pune	Zilla Parishad, Pune
• Trimurtee RMC plant. Khed	Maharashtra Jeevan Pradhikaran
Gosavi Baba Construction, Chakan, Pune	• Kendriya Vidyalaya,

3. Details of Cleanliness Drives conducted by department

S	Duration/	Area Cleaned	Co-ordinated	Remark if any
Ν	Dates		By	
1.	3.6.2022	Concrete technology Lab,	Dr (Mrs) S N	Participation in
	3.00pm to	Surroundings	Madhekar /	Cleanliness Drive:
	5.00 pm		Dr M G	1. Dr. W. N. Deulkar
			Shaikh	2. Dr. S. N. Madhekar
2.	22.1.2023	Faculty cabins, Labs,	Dr M G	3. Dr. M. G. Shaikh
	3.00pm to	Surroundings	Shaikh	4. Prof. R. P. Thanedar
	5.00 pm		1 C	5. Dr. S. B. Kharmale
			1.0	6. Shri. S. S. Gurav
				7. Ms S. B. Palve
				8. Mr. S. V. Bharambe
				9. Ms. A. D. Bhat
			200	10. Shri. P. K. Tak
1			ACT .	

Any other activity

• AY22-23, HOD, Dr. W.N. Deulkar, In-charge to look after Civil maintenance and Land acquisition officer as per order 3989/23.8.22, SC-St and handicap grievance committee as per 2022/11.4.22, DSE verification officer as per order 2589/12.05.22, Library member as per order 218 /12.01.23

Department of Computer Engineering

About Department

The Computer Engineering department was established in 2009 with the aim of providing quality education and excelling in all the endeavours it undertook.

The Department has state-of-the-art infrastructure and computing equipment supported by high-speed internet connection. Student organizations (COMPSA, ERC (Enlectic Research Centre) and Hackathon are dynamic and organize a number of academic as well as extracurricular activities. The Department has a pool of experienced, dedicated and committed faculty members who aim at delivering top class education to students. Highly skilled technical laboratory assistants help us to keep all laboratories updated with the latest software. Department organizes industry visits and expert sessions on latest technologies to expose the students to the rapid change in computer engineering domain. Student of our department have won prizes in various national and international level paper presentation and project exhibition

List of Faculties

Sr. No.	Name of faculty	Designation	Qualification	Date of Joining
1	Dr. S. U. Ghumbre	Professor and Head	PhD	May 2016
2	Dr. V. <mark>S.</mark> Inamdar	Associate Professor	PhD	13/08/2 021
3	Prof. D. J. Periera	Assistant Professor	M Tech PhD (Pursuing)	2011
4	Prof. P. V. Kulkarni	Assistant Professor	ME (CSE)	31/12/2020
5	Dr S. A. Thorat	Assistant Professor	PhD	08/06/2022
6	Prof. R. P. Bagawade	Assistant Professor	ME	08/06/2022
7	Prof. K. B. Sadafale	Assistant Professor	ME(Computer)	08/06/2022
8	Prof. S. G. Farkade	Assistant Professor	M.Tech(CSE)	03/08/2022

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List Of Supporting Staff

S N	Name	Designation	Qualification	Joined the dept on
1	Mr. Chetan Chaudhari	Instructor (T.L.A.)	Diploma in Computer Engg. BSc BIS	10/7/2013
2	Mr. C. P. Borse	Instructor (T.L.A.)	Diploma in Industrial Electronics Engg.	10/3/2014
3	Mr. P. V. Darandale	Instructor (T.L.A.)	B.E in Computer Engg	11/03/2014
4	Mr. D. S. Gupta	Instructor (T.L.A.)	B.E in Computer Engg	10/7/2013
5	Mr. Arun Jadhav	Lab Attendant	B.A	21/5/2015

No of Students in the Department for AY2022-23:

Class	FE	SE	ТЕ	BE
Intake	60+15	60+15	60+15	60+15
No. of students	68	80	77	79

List of Major Equipment's

•Desktop computers Total 140 Nos

•Lenovo Thinkcenter All in one 22Nos Configuration - CPU- Core i3 3.07GHz, RAM-

2GB HDD - 300 GB

•Wipro 20 No Configuration - CPU- Core 2 Duo 3.07GHz , RAM- 2GB HDD - 300 GB

•DELL Optiplex 780 - 60 Nos CPU- Core 2 Duo 2.93GHz , RAM- 1.9GB HDD - 300

GB Linovo Think center (with CPU): 20 No

•Core i5 2.8 Ghz RAM 4GB HDD 500GB

STTP/FDPs Attended by Faculty

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S. No.	Name of Faculty	Title of the FDP / professional development / administrative training program	Date
1	Prof R. P. Bagawade	Industrial Training Program on Deep Learning For Computer Vision & Robotics	25-07-2022 to 27-08- 2022
2	Prof R. P. Bagawade	Laboratory Practice - III (BE 2019 Course)	02-08-2022 to 02-08- 2022
3	Prof R. P. Bagawade	Amazon Web Services	22-08-2022 to 27-08- 2022
4	Prof R. P. Bagawade	Module 1 - Orientation Towards Technical Education & Curriculum Aspects	01-10-2022 to 30-11- 2022
5	Prof R. P. Bagawade	Module 2 - Professional Ethics & Sustainability	01-10-2022 to 30-11- 2022
6	Prof R. P. Bagawade	Module 3 - Communication Skills Modes & Knowledge Dissemination	01-10-2022 to 30-11- 2022
7	Prof R. P. Bagawade	Module 4 - Instructional Planning and Delivery	01-10-2022 to 30-11- 2022
8	Prof R. P. Bagawade	Module 6 - Student Assessment and Evaluation	01-10-2022 to 30-11- 2022
9	Prof R. P. Bagawade	Module 7 - Creative Problem Solving Innovation and Meaningful R&D	01-10-2022 to 30-11- 2022
10	Prof R. P. Bagawade	Module 8 - Institutional Management & Administrative procedures	01-10-2022 to 30-11- 2022
11	Dr. S. A. Thorat	5G Mobile Communications	10-04-2022 to 14-04- 2022
12	Dr. S. A. Thorat	Deep Learning for Computer Vision and Robotics	25-07-2022 to 28-08- 2022

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13	Dr. S. A. Thorat	NITTT 8 Modules of 8 Weeks Each	01-10-2022 to 30-11- 2022
14	Dr. S. A. Thorat	Cyber Security	21-02-2022 to 25-02- 2022
15	Dr. V. S. Inamdar	Python for Data science	01-01-2022 to 28-02- 2022
16	Dr. V. S. Inamdar	Introduction to Machine Learning	
17	Prof K. B. Sadafale	Big Data Computing	01-08-2022 to 31-10- 2022

18	Prof K. B. Sadafale	5 G Mobile Communications	10-04-2023 to 14-04- 2023
19	Prof K. B. Sadafale	One Day Online Faculty Orientation Program on "Database Management System" TE (AI & DS) 2019 Course	06-08-2022 to 06-08- 2022
20	Prof K. B. Sadafale	Amazon Web Services	22-08-2022 to 27-08- 2022
21	Prof K. B. Sadafale	Applications of Machine Learning	22-08-2022 to 23-08- 2022
22	Prof K. B. Sadafale	Recent Trends in Computations	18-07-2022 to 23-07- 2022
23	Prof K. B. Sadafale	Deep Learning for computer Vision and Robotics	25-07-2022 to 08-08- 2022
24	Prof S. G. Farkade	Module 1- Orientation Towards Technical Education & Curriculum Aspects	01-10-2022 to 30-11- 2022
25	Prof S. G. Farkade	Module 2 - Professional Ethics & Sustainability	01-10-2022 to 30-11- 2022
26	Prof S. G. Farkade	Module 3 - Communication Skills Modes & Knowledge Dissemination	01-10-2022 to 30-11- 2022
27	Prof S. G. Farkade	Module 4 - Instructional Planning and Delivery	01-10-2022 to 30-11- 2022
		ANT S	

28	Prof S. G.Farkade	Module 5 - Technology Enabled Learning & Life- Long Self Learning	01-10-2022 to 30-11- 2022
29	Prof S. G. Farkade Module 6 - Student Assessment and Evaluation		01-10-2022 to 30-11- 2022
30	30 Prof S. G. Farkade Module 7 - Creative Problem Solving Innovation and Meaningful R&D		01-10-2022 to 30-11- 2022
31	Prof S. G. Farkade Module 8 - Institutional Management & Administrative procedures		01-10-2022 to 30-11- 2022
32	Prof S. G. Farkade	Industrial Training Program on Internet of Thing(IoT)	30-11-2022 to 14-12- 2022
33	Prof R. P. Bagawade	Foundation Training Programme for Officers of Higher & Technical Education Department & Planning Department	22-05-2023 to 20-06- 2023
34	Prof R. P. Bagawade	5G Certificate Course	10-04-2023 to 14-04- 2023
35	Prof K. B. Sadafale	Current Trend in Information Technology Sector	20-02-2023 to 24-02- 2023
36	Prof K. B. Sadafale	One day Faculty Orientation Program on BE Project Stage-II(2019 Course)	10-02-2023 to 10-02- 2023
37	Prof K. B. Sadafale	Data Analytics With Python	01-01-2023 to 30-04- 2023
38	Prof K. B. Sadafale	Research Trained in Data Computing and Machine Learning	22-05-2023 to 26-05- 2023
39	Prof R. P. Bagawade	Module 5 - Technology Enabled Learning and Life Long Self Learning	01-03-2023 to 30-9- 2023

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Faculty Achievements

1. Paper/ Journal Publication by Faculties

Title of paper	Name of the author/s	Name of journal	Year of publication	ISSN number
Convolutional Neural Network and Histogram of Oriented Gradient Based Invariant Handwritten MODI Character Recognition	Vandana Inamdar	Pattern Recognition and Image Analysis, 2022, Vol. 32, No. 2, pp. 402–418	2022	1054- 6618
Inferencing on Edge Devices: A Time- and Space-aware Co-scheduling Approach	Danny Jeron Pereira	ACM Transactions on Design Automation of Electronic Systems Volume 28 Issue 3 Article No.: 38pp 1–33 https://doi.org/10.11 45/3576197	2022	1084- 4309
Designing Effective Chatbot System using GRU with Beam Search	Dr. S. A. Thorat	ICTACT Journal On Soft Computing Volume: 13, Issue: 01	2022	2229- 6956
R Agri-Tech: Crop Recommendation Model	Ramdas Bagawade	Journal of emerging technology and innovative research	2023	2349- 5162
Hardware Obfuscation Based Watermarking Technique for IPR Ownership Identification	Vandana Inamdar	International Journal of Reconfigurable Computing Volume 2023, s	2023	
Helmet Detection and Number Plate Recognition	Vandana Inamdar	International Journal for Research in Applied Science & Engineering Technology	2023	2321-653

Real-Time Social Distancing Detection	Vandana Inamdar	International Journal for Scientific Research & Development Vol. 11, Issue 3,	2023	2321- 0613
Improving performance of recommendation systems using sentiment patterns of user	Dr. S. A. Thorat	International Journal of Information Technology	2023	41870- 023

2. R and D activities

<u>S N</u>	Name of faculty	Details
1.	Dr. S. U. Ghumbre	Guided 01 candidates for their PhD
2.	Dr. V. S. Inamdar	Guided 03 candidates for their PhD

Students Activities

1. List of Class Representatives

Class	SE	ТЕ	BE
CR	Rahul Gawade	Namita Gawai	Rutvik Bagale

2. Annual Result by SPPU:

S.N.	Class	SE	ТЕ	BE
1	All clear (%)	81.01%	92.21%	98.59%
2	Total students appeared	79	79	77

3. List of Class Toppers with CGPA

Class	Rank	Name of Student	SGPA/CGP A (Marks)	Class
SE	1st	GUND TEJAL VITTHAL	8.95	First Class With Distinction
Comp	2nd	KAMBLI ATMARAM CHANDRAKANT	8.95	First Class With Distinction

F

Government College of Engineering and Research, Avasari (Khurd)

	3rd	 JAGTAP GOKUL SUNIL VAISHNAVI RAMESH JADHAV 	8.70	First Class With Distinction
TE Comp	1st	TAWARE SAKSHI SUNIL	9.36	First Class With Distinction
	2nd	 MALI EKNATH BHAGWAN AVISHKAR GAIKWAD 	9.29	First Class With Distinction
	3rd	KULKARNI PRADNYA SHARAD	9.21	First Class With Distinction
B E Comp	1st	 BACHKAR TEJASHRI SHIVAJI GHADGE AKASH SURESH 	9.81	First Class With Distinction
	2nd	 ANTRE PRATIBHA RAKHAMA CHINTANWAR VAISHNAVI RAMCHANDRA SALE DIVYA TUKARAM 	9.79	First Class With Distinction
1	3rd	GHOLAP ANKITA BUDHAJI	9.76	First Class With Distinction

Gate Qualified Students

 $h \ge 1$

Sr. No.	Registration number/roll number for the exam	Names of students selected/ qualified	GATE	Marks
1	CS23S12064378	Kharat Rohit Sunil	GATE 2023	64.67
2	CS23S12027174	Matsagar Kishor Pralhad	GATE 2023	39.67
3	CS23S12021032	Pradyna Sharad Kulkarni	GATE 2023	31
4	CS23S12072204	Yugandhar Shrikrushna Thakare	GATE 2023	31
5	CS23S12077042	Aditya Sham Thombare	GATE 2023	30.33
6	CS23S12058039	Rutwik Deelip Bagale	GATE 2023	28.67
7	CS23S12058294	Sandip Yadav Wagh	GATE 2023	22.67

Training and Placement Details

Year	Name of student placed / enrolling into higher education and contact details	Program graduated from	Name of the employer with contact details / Name of institution joined	Pay package at appointmen (In INR per annum) (applicable for students wh got placement) / Name o program admitted t (applicable for students wh progressed to highe education)
2022-23	Rohit Sunil Kharat	Computer	TCS	3.36
2022-23	Kishori Ravindra Jathar	Computer	Jadhe Global	5
2022-23	Divya Tukaram Sale	Computer	TCS	7
2022-23	Rishikesh Dnyandev Shinde	Computer	TCS	7
2022-23	Pratibha Rakhama Antre	Computer	TCS	3.36
2022-23	Pratika Shankar Jadhav	Computer	TCS	3.36
2022-23	Abhay Dilip Pardeshi	Computer	TCS	3.36
2022-23	Jyoti Shrimant Ganganmale	Computer	Infosys	3.6
2022-23	Borkar Shubham Balasaheb	Computer	TCS	7
2022-23	Ahire Darshan Raghunath	Computer	TCS	3.18
2022-23	Pagar Spandan Rajendra	Computer	PrepBytes	
2022-23	Akash Suresh Ghadge	Computer	TCS	7

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2022-23	Chaitanya Sudhir Jamnerkar	Computer	TCS	7
2022-23	Gholap Ankita Budhaji	Computer	TCS	3.36
2022-23	Bachkar Tejashri Shivaji	Computer	TCS	3.36

Students enrolled for Higher education

Year	Name of student who enrolled for higher education	Program graduate d from	Year of graduation	Name of institution joined	Name of program admitted to
2022-23	Rohit Sunil Kharat	Computer	2023	Indian Institute of Science, Bengaluru	M.Tech (Computer Science and Engineering)
2022-23	Sushant Balasaheb Phalake	Computer	2023	Birala Institute of technology & Science, Pilani	M.Tech (Computer Science and Engineering)
2022-23	Shubham Narendra Singh	Computer	2023	VIT Chennai	M.Tech (Computer Science and Engineering)
2022-23	Krishna Ganesh Maid	Computer	2023	COEP Technological University Pune	M.Tech (Data Science)

Details of Student representative at departmental & institute level for A. Y. 2022-23

Sr. No.	Name	Class	Name of Association	Selected Post
1	Bagale Rutvik	BE	COMPSA	General Secretary
2	Mahadik Radhkrishna	TE	COMPSA	Joint General Secretary
3	Jagtap Nachik <mark>e</mark> t	TE	COMPSA	Technical Secretary
4	Patil Suyash	TE	COMPSA	Cultural Secretary
5	Gaikwad Avishkar	TE	COMPSA	Sports Secretary
6	Pagar Spandan	BE	COMPSA	Finance Secretary

Sr. No	Name of the student	Name of the event	Organized By	Achievement s (Prize Secure)	Event Date
1	Pradnya Kulkarni	Ignited of innovators India (i2i 2021-22)			
2	Aditya Thomabare		Organized by COEP BHAU and EATON INDIA	First Prize in Social sector	27-28 Septem ber 2022
3	Poonam Salbande				
4	Harshada Kangude				
5	Prashant Dhole	Ignited innovators India of	Organized by COEP BHAU and	First Prize in	27-28 Septem ber
6	Pranav Patil	2021-22) (i2i	EATON INDIA	Environment sector	2022
7	Team Abhedya	DD National Robocon contest	IIT Delhi	Second Prize	20 July 2022
8	Team Abhedya	ABU Robocon 2022	Asia-Pacific Broadcasting Union		
9	Saumil Tiwari	MATPO programming Idol- 2023	Maha Association of Training and Placement Officers	UG PG	29 April 2023
10	Saumya Tiwari	MATPO programming Idol- 2023	of	Category -2 UG PG Pre-Final (Tab)	29 April 2023

5. Details of Curricular & Co-curricular Activities participation and Achievements

5

Government College of Engineering and Research, Avasari (Khurd)

Sr. No.	Class	Courses Offered	Course Name	Total student Participated	No of Students Completed
1	B.E	Spoken tutorial	Java	46	45
2	T.E	Spoken tutorial	Python	54	20
3	S.E	Spoken tutorial	Advanced CPP	88	66
4	S.E	NPTEL	Programming, Data structures using python	20	2
5	T.E	NPTEL	Data Analytics with Python	20	1

6. Details of Spoken Tutorial Courses offered by IIT, Bombay and by Civil Dept. for Student

Clubs

1. Enlectic Research Centre (ERC):

Achievements:

- In use Admission Reporting System in GCOEARA. <u>https://gcoeara.ac.in/Report-Admission/</u>
- Website for National Energy And Environment For Sustainable Development Conference held by GCOEARA in 2021 <u>https://www.gcoeara.ac.in/nceesd2022/</u>
- Branch Change Portal for GCOEARA.
- Android Application For Zoho Creator.

Department of Electronics and Telecommunications Engineering

About Department

The department of Electronics and Telecommunication Engineering is established in AY 2009-10 with intake of 60. Academic of the department for the students is completed by the faculty appointed by the MPSC with the support of visiting faculty appointed by the Principal. Department has 08 laboratories to cater the need of academics as per SPPU, Pune. Department arranges the site visits, expert talks, workshop/webinars/training, soft skill development programme, etc., to meet requirement of student and to make them competent engineers to cater the need of society.

Department motivates the students to take part in curricular, co-curricular and extracurricular activities and technical activities to make them grown up citizen to work for nation. These activities are like learning /certification of NPTEL-courses, Swayam, Spoken tutorial by IITB. Students are asked to participate in technical &non-technical activities arranged by the institute and other colleges in SPPU and other state of Maharashtra.

Faculty members are motivated to attend the workshops/seminars/FDP/STTP to upgrade their knowledge to share with the students. Faculty works for the SPPU Pune for conduct of various examinations, Committees, paper assessment through CAP organised by The GCOEARA/SPPU, Pune. Departments aim in future to go for NBA accreditation after satisfying the criteria of faculty and infrastructure.

Department looks after the maintenance of Electrical related work in the campus in association with the PWD. Our faculty members are involved in the Academic related activities: auch as AQAC In-charge at Institute Level (2022-2023), Exam coordination.

List of Faculties

S N	Name of faculty	Designation	Qualification	
1	Dr. M. S. Nagmode	Professor and Head	PhD in E&Tc Engg.	
2	Dr. K. V. Thakur	Assistant Professor	PhD in E&Tc Engg.	
3	Dr. N. P. Futane	Assistant Professor	PhD in E&Tc Engg.	
4	Shri. G. R. Phulay	Assistant Professor	M.E.in Electronics Engineering	
5	Dr. A. S. Mane	Assistant Professor	PhD in Electrical Engg.	
6	Shri. A. P. Gargade	Assistant Professor	M.E.in E&TC Engineering	
7	Shri. T. T. Waghmare	Assistant Professor	Ph.D. pursuing	
8	Smt. D. B. Maheshwari	Assistant Professor	M.E. in E&TC Engineering	

List of Supporting Staff

S. N.	Name	Designation	Qualification	Joined the dept on
1	Smt. M. V. Deshpande	Instructor(Technical Lab Assistant)	Diploma in Electronics & Telecommunication Engg	14.06.2023
2	Smt. A.V. Danure	Instructor(Technical Lab Assistant)	Diploma in Electronics & Telecommunication Engg.	13.08.2021
3	Shri. K. G. Kambale	Instructor(Technical Lab Assistant)	Diploma in Electronics & Communication Engg	09.12.2021
4	Smt. S.B. Morde	Instructor(Technical Lab Assistant)	BE in Information Technology	01.08.2015
5	Shri. G. P. Burde	Lab Attendant	SSC FAIL	
6	Smt. R. U. Raghuvanshi	Lab Attendant	SSC FAIL	

Details of Major Laboratories in the Department

S.N.	Name of Laboratory	Lab Incharge	Lab Assistant
1	Computer Centre Lab	Dr. K. V. Thakur	Smt. S. B. Morde
2	Microcontroller & VLSI Lab	Dr. N. P. Futane	Smt. S. B. Morde
3	Digital Electronics & LIC Lab	Shri. A. P. Gargade	Shri. K. G. Kambale
4	Analog Communication & EDC Lab	Shri. G. R. Phulay	Smt. M. V. Deshpande
5	Basic Electronics Lab	Dr. K. V. Thakur	Smt. M. V. Deshpande
6	Basic Electrical Engineering Lab	Dr. A.S. Mane	Smt. A. V. Danure
7	Power Electronics Lab	Smt. D.B. Maheshwari	Shri. K. G. Kambale
8	PCB Lab	Shri. G. R. Phulay	Smt. M. V. Deshpande

List of Major Equipment's

 TMSS320C6748DSP Development Kit (Model TMDLCDK6748) Original from Texas Instrument Video processing kit PLD kit Digital IC tester CDMA Trainer Kit PSTN TST Switching Trainer Kit Antenna Trainer Kit (RF Transmitter +RF Receiver + Steeper Motor Controller) (Amitec Make) DSO (Aplab 60MHz 1Gs15 colour Digital Storage Oscilloscope) Antennas (Amitech make) 	 Microwave Text Bench (Microwave components + Klystron Power Supply + Gunn Power Supply) Trainer Kit for Voltage And Current Relationship In balanced 3 phase Star and Delta connected load DC Series motor with loading arrangement 1 HP 1500 rpm,230 Volt DC Shunt motor with loading arrangement 1 HP 1500 rpm,230 Volt Variable DC Rectifier 0-230V at 20 Ampere 3 Phase Induction load Bank- 3 KV 12 Ampere with Ammeter And Voltmeter
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Optical Power Meter(fiber test meter)	• Squirrel cage Induction Motor with mechanical	
• Link B and Link C Optical Trainer Kit	loading arrangement without DOL starter	
• OTDR	• Online UPS for single Phase AC Input And	
• Satellite Trainer (Transponder + Uplink	Output 3KVA, 30 minutes backup	
Transmitter + Downlink Receiver)		
• Spectrum Analyzer (9Khz-1.5 Ghz)		
Generator Set		

• MOU with Pro Star M Info. Systems

MoU is signed with Pro Star M Info. Systems, for guiding Final Year-Projects, and to conduct and guide technical activities. MOU date **15/09/2022**. Under this MOU Technical Seminars/Workshops, project work support for final year students will be provided.

• Arranged Guest lecture for students of TE E&TC

Organized expert lecture for TE students on 05/11/2022, on the topic "Matlab for Engineering". Expert from Mathworks: Dr. Rahul Mahadik was invited.

- Expert sessions and lectures arranged for the students of TE & BE, from different intercollege clubs of the Institute from 5th to 12th September 2022.
- Robotics Robocon Lab (RRL) handled by the E&TC Department. The team secured 5th International Rank in the Competition, in International ABU ROBOCON 2022. Also students from the team ROBOCOM ABHEDYA participated in ROBOCON 2022 and achieved all India Rank 2 in National DD ROBOCON 2022, competition held in Delhi on July 16-17, 2022.

Details of Seminar/webinar/expert talk, organized by department / faculty

• Dr M S Nagmode delivered session as Expert for MSBTE sponsored faculty development program on "Advances in Internet of Things (IOT) and its Applications" on 25/11/2022.

1. STTP/FDPs Attended by Faculty : organized by department/faculty

S.	Faculty Name	Type of FDP	Tile of FDP /STTP	Organizing Institute	Duration
N.		/STTP	11. 4. 4		with dates
1.	Dr. K. V.		Future Trends in 5G and 6G:	ISTE Delhi, KJ College of	16Th-20 Th
	Thakur	(Attended)		Engineering and Management	August 2023
			Application	Research, Kondhhwa, Pune-411048	
2.	Shri. G. R.	FDP	Recent Trends in Artificial	Singhad College of Engineering Pune	24 Th -28 Th
	Phulay	(Attended)	Intelligence & Data Science		July 2023
		FDP	Implementing IoT & Machine	Bhivrabai Sawant College of	3 rd -7 Th July
		(Attended)	Learning Applications on	Engineering and Resaerach Narhe	2023
			Raspberry Pi	Pune	
		FDP	Future Trends in 5G and 6G	ISTE Delhi	16Th-20 Th
		(Attended)	The second second	Marchan Marchan	August 2023

Faculty Achievements

- Dr. M. S. Nagmode: Active participation in National Conference on Energy and Environment for Sustainable Development, NCEESD 2022 organized in Government College of Engineering And Research, Avasari (Khurd), on 5th and 6th July 2022. Session chair in "Fundamental issues and Strategies".
- Dr M S Nagmode has granted patent <u>:</u> Date of Grant: 09/01/2023 Patent No.-417222, "Method for The Detection of Heart Abnormality in Ultrasound Video".
- Dr. K.V. Thakur had registered and successfully completed the NPTEL course on Principles of Communication System-I Jan to April 2022 and got 75% score.
- Dr M S Nagmode Honored for the Invitation as a chairman, in SPPU for the Ph.D viva-voce on 27/07/2021.
- Dr M S Nagmode has published a Lecture note is published in Electrical Engineering book series (LNEE, volume 828) first online, Title "Performance Evaluation of Cellular Networks Bae Station Using Water Filling Algorithm", on 16 May 2022, by **Springer.**

Sr. No.	Faculty Name	Subject of Paper / Journal Published by Faculty	Organizer
	R	Waghmare T.T. and Chaturvedi P, "Super twisting approach of a higher order sliding mode controller for a flyback DC-DC converter in photovoltaic applications", Int. Jour. of Cir. Theory and Appli.,vol.51, no. 9,pp.4202- 4219, April 2023.	Wiley Publications
1	Shri. T. T. Waghmare	Tushar Waghmare, Pradyumn Chaturvedi, "Sliding mode controller for multiphase bidirectional flyback converter topology in hybrid electric vehicle applications", Energy Reports, vol.9, supplement 10,2023, pp. 40-47,	Elsevier Publication
		Tushar Waghmare, Pradyumn Chaturvedi , "A higher order sliding mode controller's super twisting technique for a DC-DC converter in photovoltaic applications", Energy Reports, vol.9, supplement 10,2023,pp.581-589,	Elsevier Publication
2		"Transmit Antenna Selection in Massive MIMO: An Energy- Efficient Approach", SSRG-International Journal of Engineering Trends and Technology (IJETT), Vol.70, Issue. 12, 170- 178, 24 December 2022.	(Scopus Indexed and Quartile) https://doi.org/10.144 45/22315381/IJETT- V70I12P218.
	Dr M S Nagmode	Manoj S. Nagmode. "Performance Evaluation of Cellular Networks Base Station using Water Filling Algorithm", <i>International Conference on Communications</i> <i>and Cyber-Physical Engineering</i> , 16 May 2022.	(Scopus Indexed)
		Manoj S. Nagmode, "Energy Efficiency Enhancement In Cellular Network", in the Proceedings of the <i>National</i> <i>Conference on Energy and Environment for Sustainable</i> <i>Development (NCEESD-2022)</i> July 5-6, 2022, at Government College of Engineering and Research Avasari	

Paper/ Journal Publication by Faculties

Students Achievements

1. Students from E&Tc got 1st Rank in National level project Competition (Technophilia-23).

Title of Project - Multipurpose Surveillance Robot. 6th National level Project Competition, Organized by - MIT Academy of engineering college, Alandi, on 24 March 2023.

Following students Participated from BE E&Tc

1)Sanket Madhav Mendke.

2) Sahil Madhukar Dhage.

- 3)Pooja Suresh Shinde.
- 4) Shraddha Ramakant Londhe.





Guided by: Dr N P Futane from E&Tc Dept.

2. Unnati Kulkarni (pass out in Academic year 2021) got admission to MS program in University of California IRVINE.

3. Samiksha Patil (pass out in Academic year 2022) got admission to MS program in University of Colorado Boulder.

4. Charushila Shirish Panwal from TE(E&Tc) selected by SPPU, Pune for National Integration Camp at Birla Institute of Technology, Patna, Bihar.

Summary of Events in the Department: Teachers Day celebrated in department

1. Teachers Day Celebration





2. MATLAB Workshop



MOU signing event



Department of Instrumentation and Control Engineering

About Department:

The department of Instrumentation and Control Engineering is established in academic year 2010-11 with intake of 60. At present around 300 students from FE to BE Instrumentation and Control are taking the education in department. Department has six laboratories to cater the need of academics as per SPPU, Pune. Department arranges the industrial visits, expert talk, training, soft skill development programme, etc, to meet requirement of student to make them a complete Instrumentation and Control Engineer by education and to take care of the society. Department motivate the students to take part in curricular/co-curricular and extracurricular activities. These activities are like online certification of NPTEL courses by Swayam, Spoken tutorial by IIT Bombay, ABINITIO a technical event in the institute, Project Competitions through Innovation club, ROBOCON club etc. Students are encouraged to take part in activities arranged by the institute and other colleges in SPPU or at State and National level too.

Faculty /staff are motivated to attend the workshops/seminars/FDP/STTP to upgrade their knowledge to share among the students. Faculty works for the SPPU Pune for conduct of various examinations, designing of syllabus, Committees, attend the paper evaluation at CAP organised by the GCOEARA/SPPU, Pune.

Department took participation in cleanliness drive in the campus / department to keep the area hygiene. Department aims in future to go for NBA accreditation after meeting the criteria of faculty and infrastructure.

• DCS Trainer Kit	Load Cell Trainer		
• PLC trainer kit	• LVDT Setup for displacement		
• Flow Measurement Setup using	measurement		
various sensors	• Dead Weight Pressure gauge Tester		
• Open loop and close loop system with	• Liquid Level Measurement setup		
PID controller	• Temperature measurement setup		
• Hydraulic and Pneumatic Trainer kit	Photoelectric Colorimeter		
• Digital Flame Photometer	• 8051/AVR Microcontroller Kits		

List of Major Equipment's

Application Software's

- Virtual instrumentation interface
- Labview Make NI software
- Automation Studio Software
- Codesys Software
- MOVICON Software Setup
- JM Suite Software

Department Library:

No. of Titles	77
No. of Volumes	2
No. of Journals/Magazine	1

List of Faculties:

Sr. No.	Name of the Faculty	Designation	Qualification
1	Dr. N. S. Nehe	Professor and Head of	BE, ME, PhD
		Department	
2	Dr. M. R. Bongulwar	Asso. Professor	BE, ME, PhD
3	Dr. D. K. Maghade	Asso. Professor	BE, ME, PhD
4	Prof. K. H. Kowdiki	Asso. Professor (CAS)	BE, ME, PhD
5	Prof. S. R. Patil	Asso. Professor (CAS)	BE, ME,
			PhD(Pursuing)
6	Prof.M.M.Akole	Asst.Professor	BE, M.Tech.,
			Ph.D.(Pursuing)
7	Prof. N. M. Karajanagi	Asst. Professor	BE, ME
8	Prof (Smt) N. P. Wagh	Asst. Professor	BE, ME,
		111	PhD(Pursuing)
9	Prof. (Smt) D. B. Trimukhe	Asst. Professor	BE, M. Tech
10	Prof. (Smt) A. V. Kulkarni	Asst. Professor	BE, ME

List of Instructors (Technical Lab Assistant):

Sr.	Name of faculty	Designation	Qualification
No.			
1	Shri. G. S. Shirke	Technical Lab Assistant	B.E. Computer
2	Shri D. T. Rathod	Technical Lab Assistant	B.E. (Etx. & Telecomm. Engg.)
3	Smt.Swati Borbande	Technical Lab Assistant	Diploma in Instrumentation, BA
4	Shri.M.A. Muley	Technical Lab Assistant	HILL

List of Laboratory Attendant:

- 1. Shri. Akash Sarke
- 2. Smt. S.M. Landge

Workshop Seminar/Expert talk / Project Exhibition/ Industrial Visit etc, organized in the department:

1) The Instrumentation and EnTC departments collaborated to organise an institute-level project exhibition on May 20, 2023, at the Sensor and Transducer Lab. Prof. S. R. Patil and Dr. N. P. Phutane managed the event. This event had a total of 160 students.



2) Seminar/ Expert talk organised is as follows:

Sr.	Title of Activity	Date of	Beneficiary
No.		conduct	
1	Carrier Guidence in Instrumentation Design Field-	23/04/2022	FE to BE
	Pratik S. yadav Instrumentation Design Engineer		Students
	Honeywell Automation , Pune (Online session)		Concession in the local distance of the loca
2	Building Automation System- Pratiksha N.	23/04/2022	FE to BE
-	Shidruk, Jr. SCADA Engineer, Sinteg		Students
	Technologies Pvt. Ltd., Pune (Online session)	C . C .	
3	Distributed Control System- Aditya R. Rasal	23/04/2022	FE to BE
	Project Engineer, TecLogos Automation Pvt. Ltd.		Students
	(Online session)		LAND P
4	Expert talk on Building Management System by	12/10/2023	TE & BE
	Pratiksha Shiduk, BMS Engineer at Datos		Students
	AutomatioSecurity		1 4 4
5	Installation Demonstration and Hands on training	09/08/2023	Department
	sessions on DCS Trainer by Forbes Marshall team		Faculties
	Shri. Sharad Rahudkar & Shri.Atul Pokale		
6	Installation Demonstration and Hands on training	30/09/2023	Department
	sessions on DCS Trainer by Forbes Marshall team		Faculties
	Shri. Sharad Rahudkar & Shri. Atul Pokale		

3) Industrial Visit:

- Industrial visit organised by the department to study Analytical Instrumentation at National Chemical Laboratory, Pune on 11th April, 2023.
- Field visit at Pune Metro organised on 12th, May 2023 for B.E Instrumentation students to study instrumentation involved and control strategies.



(NCL Biochemical Sciences Division)



(Pune Metro Station)

• Industrial visit organised by the department to study SCADA system and process Instrumentation involved in water treatment plant application at PCMC water treatment plant, Nigdi.



(PCMC Water Treatment Plant)

(SCADA System Demonstration)

Forbes Marshall Centre of Excellence

Forbes Marshall Centre of Excellence equipped with Flow – Level Laboratory with Modern DCS funded by Forbes Marshall Pvt. Ltd. Pune in 2023.Inauguration Ceremony of Forbes Marshall Centre of Excellence (Flow –Level Laboratory with Modern DCS) held at Instrumentation and Control Engineering Department dated on 7th October, 2023 at the hands of Dr.Vinod Mohitkar, Director, Directorate of Technical Education, Maharashtra State and Shri. Chandrashekhar Dhamankar, General Manager, Forbes Marshall Pvt. Ltd., Pune In the presence of Dr.D.V.Jadhav, Joint Director, RO Pune, Dr.Dhanpal Kamble Dy.Director, DTE Mumbai and Dr.D.R.Pangvhane, Principal, GCOEAR, Avasari. Dr.D.K.Maghade, Prof.S.R.Patil and Prof.D.B.Trimukhe explained and demonstrated the Flow –Level Laboratory with Modern DCS.



(Inauguration Ceremony of Forbes Marshall Centre of Excellence by Dr.Vinod Mohitkar, Director, Directorate of Technical Education, Maharashtra State and Shri. Chandrashekhar Dhamankar, General Manager, Forbes Marshall Pvt. Ltd., Pune)



(Flow – Level Laboratory with Modern DCS Setup)



(All faculties of Instrumentation & Control Engineering Department with DTE Team and Forbes Marshall Team)

Part B: -Faculty Achievements

Research Work:

- Prof. S. R. Patil is pursuing his PhD at College of Engineering Pune.
- Prof. Smt. N. P. Wagh is pursuing her PhD at College of Engineering Pune and under QIP scheme.

Patent:

• Dipmala B. Trimukhe Non-invasive Haemoglobin Level Screening & Indication System. South Africa Patent 2023/03196 filed on February 28, 2023 and granted on June 28, 2023.

STTP/FDP/Workshops Attended by Faculty

Sr. No	Faculty name	Type of FDP /STTP/ Workshop	Tile of FDP /STTP	Organizing Institute	Duration with dates
1	Prof. Shri. N.S.Nehe	Workshop	Workshop on Sustainable Development Goals	YASAHDA	16/6/2023 to 16/6/2023
2	Prof. Shri. D.K.Maghade	FDP	Research Tools for Advanced Instrumentation and Control Systems	DTE	07/02/2022 to 11/02/2022
3	Prof. Shri. D.K.Maghade	FDP	National Initiative for Technical Teachers Training, SWAYAM (Modules-08)	NITTT	Dec 2022 to Feb 2023
4	Prof. Shri. M.M.Akole	FDP	Research Tools for Advanced Instrumentation & Control System	DTE	08/02/2022 to 2/02/2022
5	Prof. Shri. N.M.Karajangi	FDP	Building an Ecosystem of Innovation and Startup		01/02/2022- 05/02/2022
6	Prof. Shri. N.M.Karajangi	FDP	Quality Assurance and Accreditation: An Overview in Respect of New Guidelines and NEP 2020		31/01/2 <mark>023-</mark> 04/02/2023
7	Prof. Smt.D.B.Trimukhe	FDP	Faculty Induction Program	MSFDA, Pune	05/06/2023 to 02/07/2023
8	Prof. Smt.D.B.Trimukhe	FDP	Recent Trends in AI Tools	D.Y.C.O.E Akurdi	24/07/2023 to 28/07/2023
9	Prof. Smt.A.V.Kulkarni	FDP	Foundation Training Program for Higher and Technical Education Class-1 Officers	YASAHDA	08/02/2023 to 21/03/2023
10	Prof. Smt.A.V.Kulkarni	FDP	Recent Trends in AI Tools	D.Y.C.O.E Akurdi	24/07/2023 to 28/07/2023

Part C: Students Activities and Achievements:

List of Class Representatives:

Class	SE	ТЕ	BE
CR1	Ketan Gore	Lokesh Chinchore	Janvi Deshpande

Annual Result by SPPU:

SE	TE	BE
88.24	100	100

Final Year Result

Total Students Appeared	Distinction	First Class	Higher Second Class

List of Class Toppers with CGPA:

Rank	ink SE		TE	TE		BE		
-	Name of Student	CGPA	Name of Student	CGPA	Name of Student	CGPA		
1	Payal Kambale	7.68	Anuja Thore	9.29	Bhoir Namrata	9.47		
2	Athrva Pawar	7.57	Sanskruti Gaulkar	9.17	Madhavi Aishwarya	9.31		
3	Vivek Todkar Mayuri Vidhate	7.32	Swaroopa Kanade	9.15	Patil Snehal	9.26		
	Sofiyan Ansari & Tejashri Jagtap		0.00		Summer S			

Spoken Tutorial Activities: Spoken Tutorial is a multi-award winning educational content activity by IIT; Bombay conducted every year to promote open source software's use among departmental students with SPPU Curriculum.

• Software offered:

Python open source software

- Number of student registered and completed training from instrumentation department : 112
- List of Spoken Tutorial Activity Toppers with percentage:

Sr.No.	Name of Student	Marks
1	Sanika Nenwani	93.0%

2	Neeraj Chikhale	88.0%
3	Abhilasha Gaikwad &	85.0%
	Lokesh Chinchore	

Students Internship:

Sr. No.	Roll No.	Name of the Student	Name of the Industry/Organizati on where completing Internship	Internshi p Beginning date	Internship End date	Type of Industry/Trainin g area
1	2016307	Janhavi Kiran	IPAC Automation	1/23/2023	2/23/2023	Core
	1	Deshpande	Pvt. Ltd.			Instrumentation
2	2016103 8	Kanade Swaroopa	IPAC automation pvt	1/23/2023	2/23/2023	Core Instrumentation
3	2016103 9	Shruti Narayan Kale	IPAC Automation Pvt.ltd.	1/23/2023	1/23/2023	Core Instrumentation
4	2016206 4	Thore Anuja Sanjay	IPAC Automation	1/23/2023	2/23/2023	Core Instrumentation
5	2016100 8	Pranay Patel	Cotmac Electronics	1/27/2023	2/24/2023	Core Instrumentation
6	2016101 8	Aditya Hemant Zagade	Autointell Services	1/23/2023	2/23/2023	Core Instrumentation
7	2126110 3	Atharv Anil Khangle	AutoIntell Services	1/21/2023	2/23/2023	Core Instrumentation
8	2016103 4	Sahu Kedarnath Kailash	Autointell services	1/23/2023	2/23/2023	Core Instrumentation
9	2126110 7	Anurag Vijaykumar Jadhav	Natural Sugar & Allied Industries Ltd.	1/27/2023	2/28/2023	Core Instrumentation
10	2016100 1	Jagdale Omkar Anil	AutoImtell Services	1/23/2023	2/23/2023	Core Instrumentation
11	2016102 5	Zankar prathmesh Jitendra	Autointell services	1/23/2023	2/23/2023	Core Instrumentation
12	2016101 7	Ved keshav Thorat	Cotmac electronic pvt.Ltd	1/27/2023	2/24/2023	Core Instrumentation
13	2016103 0	Hiremath Chaitrali Gurushant	Eazy Solution	1/22/2023	2/22/2023	Core Instrumentation
14	2016101 3	Rajashri Jagannath Naykodi	Eazy solution	1/22/2023	2/22/2023	Core Instrumentation
15	2016100 3	Yeola Sukruti Sanjay	Eazy solutions	1/22/2023	2/22/2023	Core Instrumentation
16	2126108 7	Mane Neha Dattatray	Eazy Solution	1/22/2023	2/22/2023	Research Organization
17	2016307 4	Gaulkar Sanskruti Dhananjay	Eazy Solution	1/22/2023	2/22/2023	Core Instrumentation

18	2016104	SIDDHI	Eazy solution	1/22/2023	2/22/2023	Core
10	4	PRASHANT	Luly solution	1/22/2023	2,22,2023	Instrumentation
		JAGDALE				
19	2126108	Mane Neha	Eazy Solution	1/22/2023	2/22/2023	Core
	7	Dattatray				Instrumentation
20	2016104	Mane Prashant	Autointell services	1/23/2023	2/23/2023	Core
	6	Balasaheb				Instrumentation
21	2016104	Doke komal	Akshara Milk	1/25/2023	2/25/2023	Agriculture, Food
	7	Dashrath	Products Pvt Ltd			etc.
22	2016104	Pawar Anushka	Globeminds	2/1/2023	2/28/2023	Software
	2	Vikramrao	technologies			
23	2126107	Priyanka Krushnat	COTMAC electronics	1/30/2023	2/24/2023	Core
	6	Pol	automation company			Instrumentation
24	2016104	Aishwarya Suresh	Cotmac Electronic	1/30/2023	2/24/2023	Core
	3	Ghadage				Instrumentation
25	2016102	Sejal Santosh	COTMAC	1/30/2023	2/24/2023	Core
	1	Khade	Electronics Company			Instrumentation
26	0106007	Valata '	Cotore El t	1/20/2022	2/24/2022	Com
26	2126307	Vaishnavi	Cotmac Electronics	1/30/2023	2/24/2023	Core
	3	Manikrao	Bhosari	1 1		Instrumentation
27	2126110	Phisphise Chetan Rathod	Cotmoo put	1/30/2023	2/28/2023	Core
21	1	Ciletali Katilou	Counac.pvi	Cotmac.pvt 1/30/2023 2/28		Instrumentation
28	2126306	Sangram Sunil	Phoenix industrial	1/25/2023	2/25/2023	Any Other
20	9	Damame	solutions,talwade	1/25/2025	2/23/2023	Any Other
29	2126109	Abhijeet Hanmant	Phoenix Industrial	1/25/2023	2/25/2023	Core
2)	7	Salunkhe	Solutions Pvt. Lmt.	172572025	2/23/2023	Instrumentation
	,	Surumine	Solutions I vi. Linit.	34 P	The second second second	Instrumentation
30	2126306	SARTHAK	Phoenix Industrial	1/25/2023	2/25/2023	Core
	8	JALINDAR	Solutions			Instrumentation
		NAVALE				
31	2126110	Samiksha	Coatmac	1/30/2023	2/24/2023	Core
	0	Rajkumar Bansode	endour amountained		46400	Instrumentation
20	201(102	Death Constli	Consist Frankrist	1/22/2022	2/21/2022	Com
32	2016102 8	Parth Gawali	Concise Engineering	1/23/2023	2/21/2023	Core
	0		Solutions			Instrumentation
33	2016206	Shinde Rahul Anil	AutoIntell Services	1/23/2023	2/23/2023	Core
	3					Instrumentation
34	2016103	Spruha Lade	SunFlag Iron & steel	1/30/2023	2/28/2023	Core
	3	L -	Co., Ltd.			Instrumentation
35	2126110	Vaishnavi	MGS Thermo	1/24/2023	2/20/2023	Any Other
	2	Shewate.	Systems			1 Lan
36	2016104	Vinay Bhaskar	Unitech Automation	1/25/2023	2/25/2023	Core
	0	Manwar	PVT LTD			Instrumentation
37	2126107	Chirag Prakash	RCF Limited	2/15/2023	3/7/2023	Agriculture, Food
	8	Mokal				etc.
38	2016103	Omkar Umesh	Intact Automation	2/3/2023	3/3/2023	Core
	7	Sumant	PVT. LTD.			Instrumentation
	2016101	Vaishnavi Rajesh	Pirsaheb Milk and	1/30/2023	2/28/2023	Agriculture, Food
39	2010101	valsimavi Kajesii	I II Salled WIIK and	1/30/2023	2/20/2023	Agriculture, 1000

40	2016100	Jarag Samadhan	Intact Automation	2/3/2023	3/3/2023	Core
10	5	Tukaram	PVT.LTD.	2,0,2020	0,0,2020	Instrumentation
41	2126109 1	Tanmay Santosh Shinde	Vinpak Machines Pvt. Ltd. Pune	1/24/2023	2/23/2023	Any Other
42	2016102 2	Kartikey Vinod Rokade	Rashtriya Chemicals and Fertilizers limited	2/1/2023	2/28/2023	Core Instrumentation
43	2126109 5	Pranjali Prakash Mhatre	Rashtriya Chemicals and Fertilizers Ltd. Thal Alibag (Ammonia Plant)	1/23/2023	2/22/2023	Core Instrumentation
44	2126108 8	Gaikwad Aditi Chandrashekhar	Shri Dnyaneshwar Sahakari Sakhar Karkhana Ltd	1/24/2023	3/23/2023	Core Instrumentation
45	2126109 8	Chaure Vipul Arjun	VINPAK Machines pvt. Ltd Kondhawa, Pune 4110048 Maharashtra, India	1/24/2023	2/23/2023	Any Other
46	2016101 5	Pranali vilasrao Satpute	Jsw steel coated product Ltd tarapur Boisar, 401501	2/4/2023	3/4/2023	Core Instrumentation
47	2126108 0	Tejas Ram Dhupkar	V-Ramp Automation	1/23/2023	2/23/2023	Software
48	2126108 6	Yash Mahendra Kadav	Pilon connected solution Pvt. Ltd.	1/30/2023	3/1/2023	Core Instrumentation
49	2016100 2	Ashay Sakhare	Mondeleze International Cadbury Plant	1/30/2023	2/23/2023	Agriculture, Food etc.
50	2016103 1	Samprit Kadam	Mondelez International Cadbury Plant	1/29/2023	2/28/2023	Agriculture, Food etc.
51	2126108 2	Mayur Mangesh Jadhav	VRamp automation pvt. Ltd	1/23/2023	2/23/2023	Core Instrumentation
52	2126109 4	Samrudhi Dinanath Mhatre	VRamp automation Pvt.Ltd	1/23/2023	2/23/2023	Core Instrumentation
53	2126108 5	BERDE SAHIL SUJAY	Autointell Services	1/23/2023	2/23/2023	Core Instrumentation
54	2016101 4	Arote Mangesh Sanjay	Unitech Automation	1/27/2023	2/27/2023	Any Other
55	2016101 1	Ketan Vilas Firke	Bhakti Enterprises, Bhosri	1/23/2023	2/23/2023	Core Instrumentation
56	2126110 5	Labade Payal Hanumant	Bhimashankar Sugar Factory Pargaon Shingave	1/28/2023	2/28/2023	Agriculture, Food etc.
57	2016100 9	Maitree Meshram	NITS Global	2/6/2023	2/28/2023	Software
58	2016100 7	Naimahamd Yasin Nadaf	Technovision auto components and parts pvt.ltd	2/1/2023	3/1/2023	Any Other

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50	212(109	Coult'I Dan Jamma		1/07/2022	2/2/2022	Com
59	2126108	Sushil Pandurang	Unitech automation	1/27/2023	3/3/2023	Core
_	9	Kamble				Instrumentation
60	2126107	Yash surendra	RCF. Ltd	2/1/2023	2/28/2023	Core
	9	mhatre				Instrumentation
61	2126108	Onkar namdev	Sudarshan chemical	2/1/2023	2/28/2023	Any Other
	4	mahabale	industries ltd			
62	2126108	YASH	Clariant chemicals	1/23/2023	2/22/2023	Core
	1	RAVINDRA	India Ltd			Instrumentation
		MHAPROLKAR				
63	2126108	Viraj Dilip	Clariant Chemicals	1/23/2023	2/22/2023	Core
	3	Potphode	India Ltd.			Instrumentation
64	2126109	Bandale Devavrat	Endress+Hauser	1/30/2023	2/28/2023	Core
	9	Nitin	Wetzer (India) Pvt.			Instrumentation
			Ltd.			
65	2016100	Sagar Santosh	Revatech software	2/1/2023	3/2/2023	Software
	4	Ugale	solution			
66	2016103	Tejas Machhindra	IDLE SOLUTIONS	2/3/2023	2/22/2023	Core
	5	Jadhav				Instrumentation
	-					
67	2016307	PRAJYOT	Jayashree encoders	1/25/2023	2/24/2023	Core
	0	PRAKASH	pvt. Ltd.			Instrumentation
		SAPATE	1	5. 1		and the second se
68	2016104	Tejas Sandip	mondelez	2/23/2023	2/23/2023	Agriculture, Food
	5	Ubale	international cadbury			etc.
	C		plant	- 1		
69	2016102	More Alamprabhu	Nikhil's Policy Think	1/25/2023	2/22/2023	Research
0,	0	Sanjay	Tank	1,25,2025	2, 22, 2025	Organization
	0	Suijuy	Tullk	- A.		Siguinzation
70	2126109	Kaushik Sanjay	Hindustan	2/7/2023	3/7/2023	Core
	0	Kothawade	Aeronautics Limited			Instrumentation
	Ŭ		(HAL)	-		
71	2126109	Sanket Mahabale	CALIPH CODE PVT	1/30/2023	3/2/2023	Software
/1	3	Samer Manaoure	LTD	1/30/2023	5, 2, 2025	Solution
	5					

Placement:

S.N.	Enrollment No.	Name of Students	Name of Company	Package	Photo
1	19161007	Tejas Anil Kadam	Johnson Control India (JCI)	5 LPA	
2	-		Adani Power Ltd.	6.5 LPA	FT STAD
3	19161025	Tejas Ashok Karle	Tata Consultancy services (TCS)	7 LPA	

A	101(1020	T	T-4-	25104	
4	19161029	Inamdar Heena Nijam	Tata Consultancy services (TCS)	3.5 LPA	
5	19161033	Snehal Narhari Kothalkar	AAKASH + BYJUS	7.5LPA	
6	20261082	Dipti Dipak Shirole	Adani Power Ltd.	6.5 LPA	
7	17161005	Adesh Dattatray Jare	Adani Power Ltd.	6.5 LPA	
8			iPAC Automation Pvt Ltd.	2.2 LPA	
9	19161015	Ganesh Somnath More	Adani Power Ltd.	6.5 LPA	(1)
10		INIOIC	iPAC Automation Pvt Ltd.	2.2 LPA	
11	19161030	Kedar Balaji Mane	Adani Power Ltd.	6.5 LPA	
12	19161001	Anagha Shankar Thube	Adani Power Ltd.	6.5 LPA	
13	19163072	Gayatri Vyankat Kulkarni	Adani Power Ltd.	6.5 LPA	
14	19161011	Manoj Ramdas Desale	Adani Power Ltd.	6.5 LPA	
15	19161026	Viraj Sanjeevkuma r Jadhav	Adani Power Ltd.	6.5 LPA	

16	19161048	Yogesh Navnath Kapare	Adani Power Ltd.	6.5 LPA	
17	19161009	Saurabh Bharati	Adani Power Ltd.	6.5 LPA	S
18	19161076	Akash Shivaji Kurhe	Adani Power Ltd.	6.5 LPA	
19	19161028	Kashid Vidya Dadarao	Dnyan's Automation Pvt Ltd.	2.16 LPA	
20			Virtuoso Projects & Engineers Pvt. Ltd.	2.5 LPA	
21	20261082	Shubhangi Dattu Shirole	Dnyan's Automation Pvt Ltd.	2.16 LPA	
22	20261086	Nihal Thakur	Dnyan's Automation Pvt Ltd.	2.16 LPA	
23	20261088	Rushikesh Shivaji Kandale	Dnyan's Automation Pvt Ltd.	2.16 LPA	
24			Pilon Connected Solution Pvt. Ltd.	2.5 LPA	
25	20261079	Rushikesh Kamalakar Mokal	Dnyan's Automation Pvt Ltd.	2.16 LPA	
26	19161003	Pratiksha Dilip Lalge	iPAC Automation Pvt Ltd.	2.2 LPA	
27	19161044	Madhura Deshmukh	iPAC Automation Pvt Ltd.	2.2 LPA	

28	20261095	Shraddha Ghadge	iPAC Automation Pvt Ltd.	2.2 LPA	
29	20263073	Aniket Vijay Shinde	iPAC Automation Pvt Ltd.	2.2 LPA	
30	19162064	Yash Sharad Mandhare	Siemens Energy	5 LPA	
31	19161012	Praful Shinde	Virtuoso Projects & Engineers Pvt. Ltd.	2.5 LPA	
32	20261076	Harshal Gaykar	Virtuoso Projects & Engineers Pvt. Ltd.	3 LPA	
33	20261102	Urmila Adane	Virtuoso Projects & Engineers Pvt. Ltd.	2.5 LPA	
34	20261101	Swapnali Bhopate	Virtuoso Projects & Engineers Pvt. Ltd.	2.5 LPA	
35	19161020	Somnath Gat	Pilon Connected Solution Pvt. Ltd.	2.22 LPA	
36	19161021	Pandhari Barle	Uni-Tech Automation Pvt. Ltd.	2.0 LPA	
37	20261094	Adinath Dangat	Pilon Connected Solution Pvt. Ltd.	2.22 LPA	
38	20261089	Sagar Dhage	Pilon Connected Solution Pvt. Ltd.	2.22 LPA	

39	20261082	Shubhangi Shirole	Emerson Electric Co. Ltd	5.5 LPA	
40	19161022	Prajakta Ramteke	Emerson Electric Co. Ltd	5.5 LPA	
41	20261087	Vaishanvi Warale	Emerson Electric Co. Ltd	5.5 LPA	
42	20261095	Shraddha Ghadge	Emerson Electric Co. Ltd	5.5 LPA	
43	20261082	Shubhangi Shirole	Seiton Technology, Pune	3 LPA	
44		Suhas Bhalerao	Seiton Technology, Pune	3 LPA	
45	19161029	Inamdar Heena Nijam	Seiton Technology, Pune	3 LPA	
46	20261081	Sanket Jadhav	Seiton Technology, Pune	3 LPA	
47	20263073	Aniket Shinde	Seiton Technology, Pune	3 LPA	6
48	20261087	Vaishnavi Warale	Seiton Technology, Pune	3 LPA	40000 S
49	20261077	Sameer Khopade	Seiton Technology, Pune	3 LPA	

Industry Sponsored Project AY 2022-23

S. N.	Roll No.	Name of Student	Project Guide	Project Title	Industry Sponsored/ Collaborative/ Multidisciplin ary
1	1916206	Yash Sharad Mandhare	Prof.S.R.	Performance	Collaborative
	4		Patil	enhancement and	Institute:
	1916100	Tejas Anil Kadam		controlling of	COEP
	7			Boiler & Heat	

2	1916104 8 1916101 2 1916100	Yogesh Navnath Kapare Praful Prakash Shinde	Prof. M.	exchanger pilot plant	Technological University
	3 1916102 2 1916307 0 2026109 2	Lalge Pratiksha Dilip Ramteke Prajakta Rakhe Madhur Umesh Pathak Kashyap Anil	M. Akole	Thermal power plant automation (Part 1)	Industry sponsored: COTMAC Pune
3	2026107 7 1916101 8 2026107 8 2026108 9	Sameer Shivaji Khopde Bhushan Sunil Khale Chinmay Bhimrao Lokhande Sagar Nivrutti Dhage	Dr K. H. Kowdiki	Thermal power plant automation (Part 2)	Industry sponsored : COTMAC Pune
4	1916104 4 1916102 4 1916103 6 1916307 1	Madhura Hande-Deshmukh Sakshi Arjun Tapkir Roshani Ravindra Gawai Sarang Sunil Khakal	Prof. S.R. Patil	Ball balancing Robot - A Ballbot	Multidiscipli nary: Automobile Department
5	1916100 1 1916100 6 1916101 3	Thube Anagha Shankar Kotwal Samruddhi S Chirke Pooja Ravsaheb	Dr. N. S. Nehe	Water distribution system using PLC HMI -	Industry sponsored: Vramp Automation

Department of Mechanical Engineering

About Department

The department was established in 2009 and has very good infrastructural facilities including fairly well-equipped laboratories and a Seminar Hall. The department is accredited by National Board of Accreditation for 3 years from July 2022 to June 2025. The department has 9 regular faculty out of which 5 faculty members are Ph. D holders and other are pursuing. All faculty members are qualified, well experienced and dedicated. 3 faculty members are recognized as Ph. D guide in SPPU. In addition, there are 5 Technical Laboratory Assistants and 2 Laboratory Attendants, all of whom are also well qualified. Emphasis is given to structured curriculum coverage, by arranging industrial visits, expert talks, guest lectures, guidance sessions and trying to have industry sponsored projects as far as possible.

Department is following best practices such as student-teacher mentoring scheme to fulfill academic and overall development of students. Students are constantly encouraged to participate in sports, cultural and technical activities so as to have all round development. Students are permitted to attend and participate in various competent international level technical competitions like BAHA, TIFAN, and ROBOCON etc. Students are also encouraged and permitted to go for 4-week industry internship to ensure increase employability.

Sr. No.	Name of faculty	Designation	Qualification
1	Dr. S.A. Sonawane	Associate Professor	PhD in (Mech.), M.E. (Mech - Design)
2	Dr. S. V. Kshirsagar	Associate Professor	PhD in (Mech.), M.E. (Mech - Design)
3	Dr. S. S. Deshpande	Associate Professor	PhD in (Mech.), M.E. (Mech - CAD CAM)

List of Faculties

4	Dr. C. M.	Associate Professor	PhD in (Mech.), M.E. (Mech -
4	Sewatkar	(CAS)	Thermal)
5	Dr. S. V. Karmare	Associate Professor	PhD in (Mech.), M.E. (Mech Power
6	Dr. B. A. Patil	(CAS) Assistant Professor	Engg.) PhD (Mech. Engg), M.E. (Mech CAD CAM)
7	Mr. N. V. Sali	Associate Professor (CAS)	M.E. (Mech Power Engg.)
8	Mr. J. M. Arackal	Assistant Professor	M.E. (Mech Design)
9	Mr. A. S. Kousal	Assistant Professor	M.E. (Mech Heat Power Engg.)
10	Mr. N. D. Padawale	Assistant Professor	M. Tech (Machine Design)
11	Mrs. S. R. Kulkarni	Assistant Professor	M. Tech (CAD CAM)

List of Instructors (Technical Lab Assistant)

Sr. No.	Name of faculty	Designation	Qualification
1	Shri. B. M. Bolkavthekar	Instructor (T.L.A.)	NCTVT, ITI
2	Smt. P. D. Borade	Instructor (T.L.A.)	Diploma in Prod. Engg.
3	Shri. P. R. Korde	Instructor (T.L.A.)	Diploma in Mech. Engg.
4	Smt. S. S. Jaware	Instructor (T.L.A.)	Diploma in Metallurgy Engg.

5	Smt. K. P. Bhagwat	Instructor (T.L.A.)	Diploma in Computer Technology
6	Shri. M. V. Hande	Instructor (T.L.A.)	MA, NCTVT, ITI

List of Laboratory Attendant

- 1. Shri. P. R. Sonawane Lab Attendant, B. A., Diploma in Civil Engg.
- 2. Shri. A. G. Jadhao Lab Attendant, B. A.
- 3. Smt. C. A. Hagare Lab Attendant, 9th Pass

o of Students in the Department for AY2022-23

Class	SE	ТЕ	BE
Intake	60+12	60+12	60+12
No of students	70	76	77
No of girl student	15	14	21
No of boy student	55	62	56

Details of Major Laboratories in the Department

Sr. No.	Name of Laboratory	Area as per AICTE m2	Available areas sqm	Cost of Lab Rs.	Lab Incharge	Lab Assistant
1	Thermo Lab.	66	120	606687	Dr. C. M. Sewatkar	Shri. B. M. Bolkavthekar
2	RAC Lab	66	120	539255	Dr. B. A. Patil	Shri. B. M. Bolkavthekar
3	Turbo Lab.	66	20	424500	Dr. S. V. Karmare	Shri. B. M. Bolkavthekar
4	FM Lab.	66	80	455914	Mr. A. S. Kousal	Shri. B. M. Bolkavthekar
5	CAD CAM Lab	66	240	6986552	Dr. S.A. Sonawane	Smt. K.P. Bhagwat
6	Internet Lab	66	140	<u>)</u>	Dr. S. S. Deshpande	Smt. K.P. Bhagwat
7	TOM Lab.	66	120	922938	Dr. S. V. Kshirsagar	Smt. S. S. Jaware
8	DOM Lab.	66	120	170570	Dr. S. V. Kshirsagar	Smt. S. S. Jaware
9	MQC Lab.	66	60	790550	Dr. B. A. Patil	Smt. S. S. Jaware

10	Seminar Hall	9	180	179395	Dr. C. M.	Smt. P. D.
10	Seminar man	1.1250	100	100 117555	Sewatkar	Borade
11	Heat Transfer	66	240	353618	Dr. S. V.	Shri. B. M.
11	Lab	00	240	333018	Karmare	Bolkavthekar
12	BME Lab	66	120	41050	Mr. A. S.	Smt. P. D.
12	DIVIE Lau	00	120	41030	Kousal	Borade
13	Mechatronics	66	60	2482037	Mr. N. V.	Smt. P. D.
15	Lab.	00	00	2462037	Sali	Borade
14	Metallurgy	66	70	661917	Mr. J. M.	Smt. P. D.
14	Lab.	00	/0	001917	Arackal	Borade
15	HP Lab.	66	90	950623	Dr. S. S.	Smt. P. D.
15	ПР Lab.	00	90	930023	Deshpande	Borade
16	Drawing Hall	122	206		Mr. N. D.	Smt. P. D.
16	Drawing Hall	132	386		Padawale	Borade
17	PROJECT	((Mr. J. M.	Shri. B. M.
17	Lab.	66	120		Arackal	Bolkavthekar
10	Skill	66	120	120 73435	Mr. N. D.	Smt. P. D.
18	Development	66			Padawale	Borade

List of Major Equipment's

• Ice plant trainer kit	• Mechatronics lab set up		
• Design and fabrication of vapour	• Binocular upright metallurgical microscope		
Absorption Refrigeration test rig	co-axial body		
• Catia V5 R21latest version- 20 user	Brinell cum Rockwell hardness tester		
• Automation Studio software- version 5.7 –	Horizontal Muffle furnace		
5 user	• Fine Polishing machine Single disc		
• Camlab CNC software – Make CADEM	• Jominy end Quench test quenching fixture		
• Temperature distribution in composite wall	• Charpy Izod Test (Impact Test Equipment)		
• Heat transfer in force Convection	Profile Projector equipment		
• Parallel flow and counter flow heat	• Floating carriage micrometer (with standard		
exchanger	accessories and accuracy 0.2 micron)		
• Flow transducer trainer kit	Monochromatic light unit		
XY Position Control System	• Cam analysis apparatus		
• Strain gauge trainer – Strain /force	• Prony brake dynamometer apparatus		
measurement	• Static and dynamic balancing of machine		
• Study of Linear Conveyor control systems	Balancing of reciprocating masses		
CARTER PA	• Vibration meter 2050		

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S.N.	Date of Visit	Name of Industry	Subject	No. of beneficiaries
	111	Class: B.E. MEC	HANICAL	
1	18-10- 2022	Katraj Milk Processing Plant, Avasari, Pune	Heating Ventilation Air- Conditioning and Refrigeration (402041)	70
2	29-04- 2023	M/S./Parag Milk Foods Ltd. Manchar, Dist. Pune	Energy Engineering (402049)	78
	113	Class: T.E.MEC	HANICAL	- 8753
1	28-09- 2022	 M/S. Nimako SPM, Chikhali, Pune. M/S. Precision Engg. Services, Talawade, Pune Center for Science Education and Communication (Formerly: Science Park), S.P.P.U. Pune 	Skill Development (302047) Digital Manufacturing Lab. (302046) Mechatronics (302044)	78
2	25-04- 2023 and 26- 04-2023	M/S. Valeo India Pvt. Ltd. Lonikand, Pune.	Fluid Power and Control (302054) Measurement Lab. (302053)	76
		Class: S.E.MEC	HANICAL	
1	13-12- 2022	M/S. Proto D Industries Pvt. Ltd. Chakan, Pune.	Engineering Material And Metallurgy (202044) Electrical and electronics Engineering (203156)	60
2	10-05- 2023	 M/S. Kalyani Maxion Wheels Private Ltd., Chakan, Pune. M/S Pentastra Engineering LLP., Chakan, Pune 	Kinematics of Machinery (202047) Machine Shop (202051)	70
3	26-05- 2023	M/S. Excel Vehicles, Manchar, Dist. Pune	Applied Thermodynamics (202048)	70

Details of Site Visit Arranged for the students











Visit to - Center for Science Education



M/S. Valeo India Pvt. Ltd.





Visit to - M/S. Proto D Industries Pvt. Ltd. Chakan, Pune.

Zenith 2022-2023





Visit to - M/S. Kalyani Maxion Wheels Private Ltd., Chakan, Pune.

Visit to - M/S. Excel Vehicles



Visit to - M/S Pentastra Engineering LLP. Chakan, Pune



Experts from M/S. Valeo Industries Pvt. Ltd. Pune Delivered a lecture on 21/04/2023

S.N.	Date	Expert Details	Topic of Discussion	No. of beneficiaries
1	19-11- 2022	Mr. Manoj Kale, (GCOEARA ALUMNI) Sr. Application Engineer, M/S. Bentley Systems, Pune	Career Opportunities in Plant and Mechanical Industry Introduction to Betley Software & students License	60
2	21-04- 2023	Mr. Shrikant Jagtap, HR Mr. Shrpad Hadpad, Manager R&D, M/S Valeo India Pvt. Ltd. Lonikand, Pune	Electric Vehicle Technology, components, Valeo involvement in EV Business, Design of Automotive components. etc.	90
3	03-05- 2023	Dr. Raju Kadam, Manager, Research & Development, BHARAT FORGE, Kalyani centre for technology & Innovation, Pune	Failure analysis of materials Fatigue & Creep studies	60
4	04-05- 2023	Mr. Amol Korde, Principal Technology Solution in System Dynamics, Group, M/S. Hexagon Manufacturing Intelligence	Different EV Layouts Need of Gear Transmission Basic Gear and Motor Sizing Design Validation	81
5	18-05- 2023	Dr. Jaya Goyal, PCCOE, Pune	Energy management for Smart Homes in India	90

Details of Seminar/webinar/expert talk, organized by department / faculty:



Dr. Raju kadam delivering a lecture on 03-05-2023

Faculty Achievements

Books Published: NIL Paper/ Journal Publication by Faculties

Sr. No.	Faculty Name	Subject of Paper / Journal Published by Faculty	Organizer
1	S. A. Sonawane	Design and Development of Multipurpose Land Rover	IEEE organized by VIT, Vellore
2	Chandrashekhar Sewatkar	Experimental Investigation of Pump Driven closed loop thermo syphon system	Heat Transfer
3	Niranjan Padawale	Investigation into Tribological Performance of Corn-cob ash reinforced epoxy composite using RSM based TLBO algorithm	Materials Today:Procedings
4	Suhas Karmare	Investigation of Convective Heat transfer Inside Evacuated U Pipe Solar Thermal Collector with TiN NanoFluid and twisted tape combination	Applied Solar Energy
5	Suhas Karmare	Experimental Investigation of Convective heat transfer inside tube with stable plasmonic TiN nanfluid and twisted tape combination for solar thermal application	Springer Verlag GmbH Gerrmany
6	Suhas Karmare	Experimental Investigation of convective heat transfer performance of TiN nanofluid charged U-pipe evacuated tube solar thermal collector	ELSEVIER Ltd

NPTL Course attended by Faculty and Students

- **a.** Mr. A. S. Kousal had registered and successfully completed the NPTEL course on Heat Exchangers Fundamentals and Design Analysis during July to Oct 2022.
- **b.** Mr. A. S. Kousal had registered and successfully completed the NPTEL course on Interfacial Fluid Mechanics during July to Oct 2022.

STTP/FDPs Attended by Faculty

S N	Faculty name	Type of FDP /STTP	Tile of FDP /STTP	Organizing Institute	Duration with dates
1	Dr. B. A. Patil	One Week	Quality Assurance & Accreditation: An Overview in respect of New Guidelines and NEP 2020	Govt. College of Engg. Jalgaon	31 st Jan. 2022 to 04 th Feb. 2023
2	Dr. B. A. Patil	ISTE approved One Week National Level	Recent Advancement in Material, Micro- Manufacturing and Characterization	DYP Institute of Technology, Pimpri, Pune	13 th March 2023 to 17 th March 2023

		ONLINE FDP	6	1333	15
3	Dr. B. A. Patil	One Week STTP	Optimum Design: Principles & Applications	National Institute of Technology Agartala	1 st May 2023 to 5 th May 2023
1	Mr. Niranjan D. Padawale	42 day	Foundation Training Program for Class-I Officers of Higher and Technical Education Department at YASHADA, Pune	YASHADA, Pune	2 nd January -12 th February 2023
2	Mr. J. M. Arackal	42 day	Foundation Training Program for Class-I Officers of Higher and Technical Education Department at YASHADA, Pune	YASHADA, Pune	17 th april - 28 th May 2023
3	Mr. A. S. Kousal	42 day	Foundation Training Program for Class-I Officers of Higher and Technical Education Department at YASHADA, Pune	YASHADA, Pune	8 th February - 21 st March 2023

Training/ Workshop/Conference/Seminar/Webinar Attended by Faculty

Sr. No.	Name of Faculty	Details	Date
1.	Mr. Niranjan D. Padawale	Data Science (ML & AI) organized by EICT Academy, IIT Kanpur	26 th sept -30 sept 2022
2	Mr. J. M. Arackal	Python Programming- A practical Approch organized by EICT Academy , IIT Kanpur	Completed on 31- 03-2023 (2 Weeks)
3	Dr. S. V. Karmare	EV Technology and battery Modelling organized by Modern College of Engineering, Pune	28 th February-05 th March 2023

Students Activities

List of Class Representatives

Class	SE	TE	BE
CR	Joshi Somesh Mahesh	Anandrao Atharv Bhiku	Varpe Chetan Sandip

Annual Result by SPPU

Class	SE	ТЕ	BE
All Clear (%)	53.62	63.16	92.21
ATKT (%)	46.38	36.84	7.79
Total student	69	76	77

List of Class Toppers with CGP

Sr. No.	SE	TE	BE
1	Joshi Somesh Mahesh,	Anandrao Atharv Bhiku,	Varpe Chetan Sandip,
	SGPA - 8.55	SGPA - 9.33	CGPA – 9.05
2	Patil Gaurav Adhikar,	Kute Sonal Ravindra,	Unhale Pallavi Mukund,
	SGPA - 8.27	SGPA - 8.67	CGPA – 9.04
3	Gadhave Om Ramesh,	Sakshi Sambhaji Pawar,	Jaykare Abhishek Prakash,
	SGPA - 7.86	SGPA - 8.36	CGPA – 8.87

Details of Student representative at departmental & institute level for A. Y. 2022-23

Sr. No.	Name	Class	Selected Post
1	Joshi Somesh Mahesh	SE	48
2	Anandrao Atharv Bhiku	TE	
3	Varpe Chetan Sandip	BE	MESA Representative

Details of Curricular & Co-curricular Activities participation and Achievements-	
Academic Year -2022-2023	

Sr. No.	Name of the student	Name of the event	Organised By	Prize Secure	Event Date	Class
1	Vaishnavi Rahane	NAVDHARA 2K22	PCCOEAR, Ravet	2nd	23 rd Sept 2022	SE
	Nivedita Bansode					SE
	Yasin Sayyed	L	100	/		BE
	Nayan Patil	Paper presented:	IDEE	Paper presented	5 & 6may 2023	BE
2	Shoyab Sayyad	Design & Development of	IEEE organized			BE
	Bhargav Patil	Multipurpose Land Rover	by VIT, Vellore			TE
1	Shridhar Nandiwale	Shridhar			123	SE
1	Yasin Sayyed		1000	11 / 16		BE
	Nayan Patil	Title of Paper :Design			June 2023	BE
3	Kiran Mhetre	& Optimization of FSAE Wheel Assembly	IJSDR ISSN: 2455-	Paper Published		TE
	Bhargav Patil	using Finite Elemental Analysis	2631	inIJSDR		TE
	Saurabh Kale					TE
4	Sachidanand Kulkarni	Water Rocketory	JCOE, Kuran	1st	3/5/2023	FE

Details of Spoken Tutorial Courses offered by IIT, Bombay undertook of Mechanical Engineering Student

S N	Class	Courses Offered	Total student Participated	No of Students Passed / %result	Date of Exam.
1	SE	Python 3.4.3	70	26 (37.14%)	16-12-2022
2	TE	Latex	76	9 (11.84 %)	11-11-2022
3	BE	Q-cad	77	39 (50.64 %)	10-11-2022

Social Activities

Details of Testing and Consultancy

Sr. No.	Name of the party	Name of Party	Name of Party Descripsion of work	
1	Executive Engineer Rular Water Supply Dist. Pune	Executive Engg Rular Water Supply Dist. Pune	Ghanta gadi	03.03.23
2	Maharas <mark>htra Tribal</mark> Public School Society, Nashik	Maharashtra Tribal Public School Society, Nashik	MUG inspection	3/13/2023
3	Deputy Executive Engineer Dist. Pune	Albra, Rupratan and Puja	Shavdahini Pre Inspection	9/29/2022
4	Project Officer, Integrated Tribal Development Project, Nashik	Project Officer, Integrated Tribal Development Project, Nashik	RO filter inspection	1/5/2023
5	Deputy Executive Engineer Dist. Pune	Shree Enterprises	Gym equipment inspection	12/21/2022
6	Deputy Executive Engineer Dist. Pune	Albra and Rupratan	Shavdahini Pre Inspection	1/23/2023
7	Project Officer, Integrated Tribal Development Project, Ghodegaon	Gadadubai Addiwashi Mahila bachat gat	Printing press	12/14/2022
8	Project Officer, Integrated Tribal Development Project, Ghodegaon	Project Officer, Integrated Tribal Development Project, Ghodegaon	Heat Pump	4/20/2023

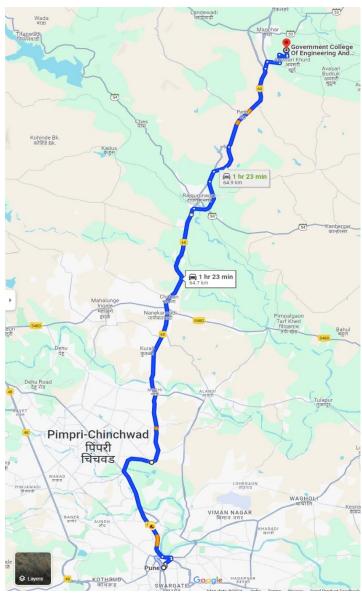
9	Project Officer,, Integrated Tribal Development Project, Nashik	Project Officer, Integrated Tribal Development Project, Nashik	Integrated TribalAnti sucideDevelopment Project,rod	
10	Granu Aqua, Aurangabad	Granu Aqua, Aurangabad Tank TS		5/3/2023
11	Deputy Executive Engineer Dist. Pune	Heramh Benches		4/29/2023
12	Avega Tasta Solutions, Nashik	Maharashtra Tribal Public School Society, Nashik	MUG inspection Post	6/28/2023

Major Customers for the consultancy by the department are

Zilla Parishad, Pune Adivasi Mahavikas Mandal, Ghodegaon Adivasi Mahavikas Mandal, Nashik

Details of Cleanliness Drives conducted by department

S N	Duration/ Dates	Area Cleaned	Co- ordinated By	Remark if any
1	15/07/2022 10.30 am to 11.30 am			The second
2	16/9/2022 10.15 am to 11.15 am	R	2	
3	11/11/2022 10.30 am to 11.30 am	Corridor, Surroundings, out Premises, Passage, Ground Steps.	Mr. J. M. Arackal	All Mechanical Faculty, Staff and Students
4	18/3/2023 10.15 am to 11.15 am	83		
5	21/05/2023 10.30 am to 11.30 am			ang



Distance from Pune : 64.7 km (ETA : 1 hr 23 min)



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