NEWSLETTER

GOVERNMENT POLYTECHNIC KHAMGAON

(Under Directorate of Technical Education, Maharashtra Government)

Vol. No. 31, July 2025 http://www.gpk.edu.in/

VISION

A center of excellence creating globally competent Engineers satisfying needs of industry and society.

DEPARTMENTS

COMPUTER ENGG.

CIVIL ENGG.

MECHANICAL ENGG

ELECTRICAL ENGG.

ELECTRONICS & TELECOMMUNICATION ENGG.

MISSION

M1. Educate and train in multidisciplinary programs to develop competencies to serve industrial and societal needs.

M2. Endeavor constantly for development of infrastructure and facilities to cope up technological progress.

M3. Enhance the skills through industry institute interaction and inculcate leadership qualities, ethical values and environmental awareness in students to transform them into competent human resource.

M4. Ensure facilities of employability encourage entrepreneurship and promote lifelong learning.

DEPARTMENT OF COMPTER ENGINEERING

GOVERNMENT POLYTECHNIC KHAMGAON

(Under Directorate of Technical Education, Maharashtra Government)

Inside……

VISION

Provide skilled and competent Computer Engineers to contribute towards the advancement of technology useful for industries and society.

MISSION

M1-Impart industries need based technical education by providing exposure of latest tools and technologies in the area of computer engineering.

M2-To provide training and guidance with focus on industrial exposure, employability and entrepreneurship development.

M3-Upgrade and maintain facilities for quality technical education with continuous effort for excellence.

M4-Promote curricular, co-curricular activities and attitude for lifelong learning.

PROGRAM OUTCOMES (PO)

1. **Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

2. **Problem analysis:** Identify and analyze well-defined engineering problems using codified standard methods.

3. **Design/ development of solutions:** Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.

4. **Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

5. **Engineering practices for society, sustainability and environment:** Apply appropriate technology in context of society, sustainability, environment and ethical practices.

6. **Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.

7. **Life-long learning:** Ability to analyze individual needs and engage in updating in the context of technological changes.

PROGRAM EDUCATIONAL OBJECTIVES (PEO)

PEO1: Apply knowledge and skill in professional industries or as an entrepreneur to provide solutions for industries, society and allied fields.

PEO2: Adapt and upgrade technological change through training and peruse higher education in computer engineering field.

PEO3: Adapts ethical practices for carrier growth through lifelong learning.

PROGRAM SPECIFIC OUTCOMES (PSO)

PSO1 (Logic development and implementation): Develop logic and implement it effectively to produce automated tools and applications.

PSO2(ENTP): Use knowledge in computer Engineering Use computer engineering knowledge for bright future to be a professional, an entrepreneur or zest for higher studies.

From the

EDITOR

"The Future of Computing: Embracing Innovation and Adaptability"

As we stand at the intersection of rapid technological advancements and evolving societal needs, the role of Computer Engineering has never been more critical. The pace at which technology transforms our world is both exhilarating and challenging. As a professor of Computer Engineering at Government Polytechnic Khamgaon, I am privileged to witness and contribute to this dynamic field, nurturing the next generation of innovators and problem-solvers.

One of the most exciting aspects of computer engineering is its pervasive impact across all sectors. From healthcare to finance, from entertainment to education, every industry is being reshaped by digital innovation. Our responsibility as educators is to ensure that our students are not only proficient in current technologies but are also adaptable and ready to embrace the unknown.

One of the key strengths of polytechnic education is its emphasis on experiential learning. Our students engage in numerous projects, internships, and co-op programs that allow them to apply theoretical concepts to practical situations. This hands-on approach fosters critical thinking, problem-solving skills, and innovation—qualities that are highly sought after by employers in the tech industry.

In our department, we emphasize a curriculum that balances foundational knowledge with cutting-edge developments. Core subjects such as Algorithms, Data-Structures, Operating-System, Computer-Networks, and ALP-Programming provide the bedrock upon which more specialized areas like Artificial Intelligence, Machine learning, IOT, Blockchain, Ethical Hacking, and Cyber-Security are built. This approach ensures that our students have a robust understanding of fundamental principles while being equipped to engage with the latest technological trends.

In conclusion, polytechnics are instrumental in advancing technical education and equipping students for successful careers in computing. By combining academic excellence, practical experience, and industry collaboration, we are shaping the next generation of tech leaders who will shape the future of our digital world. As the tech industry evolves, we remain dedicated to providing high-quality education that benefits both our students and the broader community.

Prof A.W.Sawarkar

Principal Insights ...

Dear Readers,

The Journey of Thousand Miles Starts with a Small Step!

It is an honor and a thing of pride to be a part of an institute which has long legacy of success. Government polytechnic Khamgaon basically, caters to the needs of rural area in and around Buldhana district.

It is very much complimented by polytechnic to serve the purpose of technical education of all strata of society. Government Polytechnic Khamgaon was founded in 1961. It started with three core branches viz. Civil Engg., Mechanical Engg. & Electrical Engg. Later it spread its wings and began two branches named Computer Engg. & Electronics Engg.

Government Polytechnic Khamgaon is a stepping stone in the shine of Vidarbha region. Institute has given numerous engineers to the society since 1963. They are servings to the best of their capacity because of the strong foundation and platform provided by Government Polytechnic Khamgaon. That's why Institute has always been sought after by students all over Maharashtra. The cream and meritorious students are further trained and polished with required engineering skills and human values, so that society gets skilled engineers and good human beings.

After taking over the charge of such a vibrant campus, it's an opportunity and challenge for me as an engineer and Principal. Out of existing five branches recently two branches viz. Electronics engineering and civil engineering got NBA accreditation for year 2023-2026. Recently two programs Computer and electrical engineering are eligible and applied for NBA in the year 2024-2025. Two foster the quality by making every department to be accredited by NBA in due course of time.

Alumni association of GPK registered in 2018 and total fund collected upto 2024 is 13 Lacs. Admission status of GPK is 100%. Internal Revenue Generation of GPK for recent 4 years is 1.6 cr. GPK has around 35 MOU.

The challenge is very much accepted by starting technical activities like internships, MOOCS, industrial visits, expert lectures in the field of engineering, soft skills and so on.

New ideas, suggestions, corrections are welcomed so that Government Polytechnic Khamgaon will be on national and international horizon in the field of engineering.

The woods are lovely, dark and deep

But I have promises to keep

And miles to go before I sleep

And miles to go before I sleep

Dr. S. S. Prabhune

Principal

G. P. Khamgaon

FROM
HOD'S DESK

Dear Friends,

It gives me immense pleasure to lead the department of Computer Engineering and I take the privilege to welcome you all.

The department of computer engineering established in 2004, offers 3 years diploma in computer engineering with Sanctioned intake of 60 students.

The department has well qualified and highly motivated faculty members and support staff.

The Laboratories are adequately equipped with state-of-the-art facilities.

Today's cyber world is mainly focusing on Computer education, we at Department of computer engineering continuously taking efforts for improvement and enhancement of quality in every aspects of students.

Department is committed to provide excellent Technical education and promote academic freedom. The efforts are consciously planned for overall development of students to become globally competent, innovative, dynamic, and with good moral values.

Prof. S.V.Paranjape

HOD

Dept. of Computer Engg.

HIGHLIGHTS 2024-25

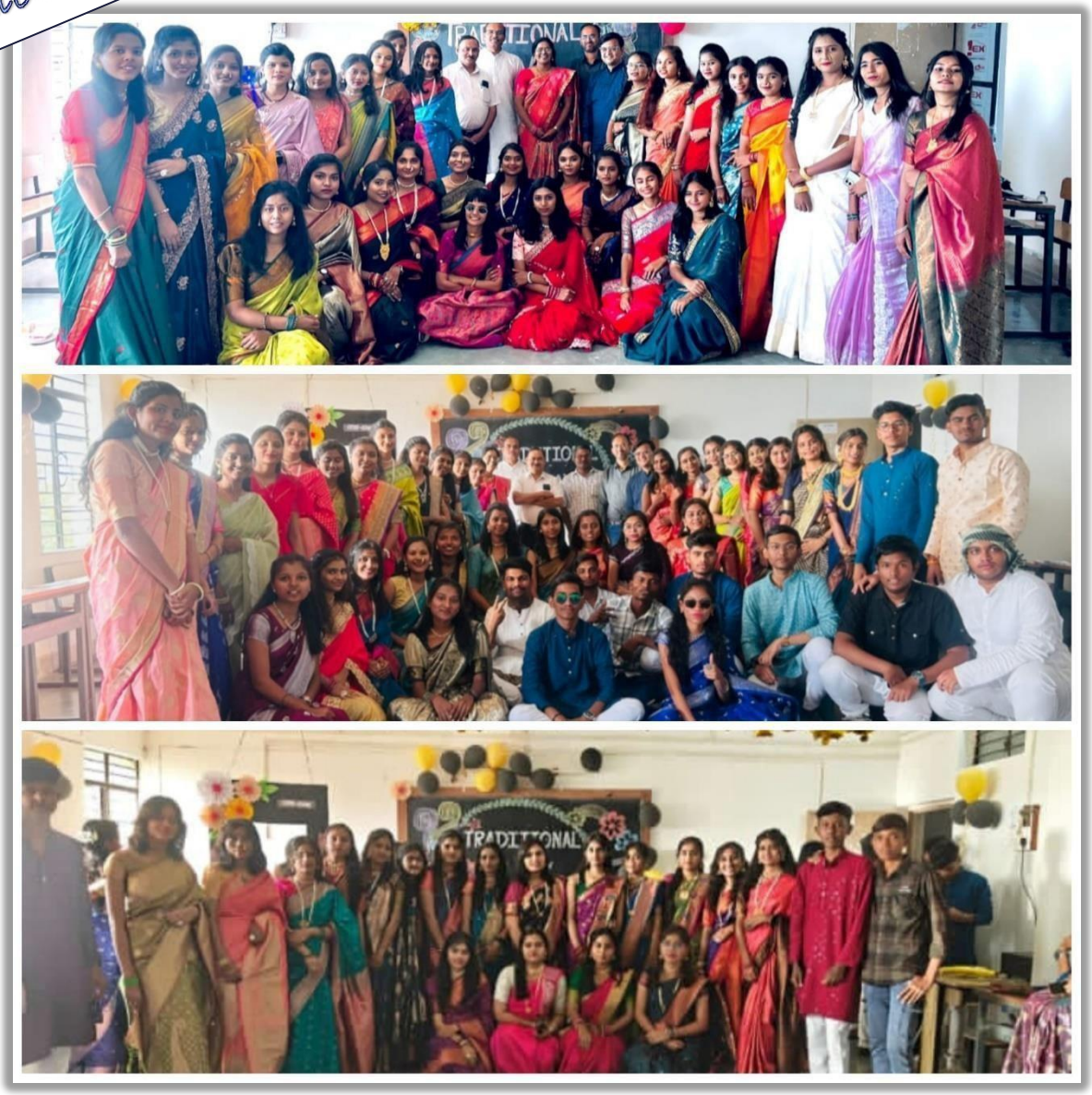
Fresher's Party for 1st Year

On **October 19th 2024**, the **COESA** committee organized a warm and lively freshers' party for the newly arrived first-year students. The second and third-year students arranged various games, decorated the hall, and provided snacks for their juniors. With the principal's permission and support from the HOD and departmental staff, the event was well-organized.

Volunteers like **Prerna Mahokar**, **Lina Dhande, Shifa Ali, and Shaan Shukla** hosted the event excellently. Seniors warmly welcomed their new juniors to GPK, wishing them a bright and successful journey over the next three years. They encouraged the newcomers to learn more and achieve more.

CULTURAL-EVENTS 2024-25

Traditional Day



On February 27th, 2025, the COESA committee organized a vibrant Traditional Day for the Computer Department. Students from the first, second, and third years showcased India's diverse traditions through their attire, creating a splendid display of cultural heritage. Both teachers and students reveled in the joyful atmosphere as various traditions converged into a beautiful mosaic. The event was a heart-warming experience, uniting the community in appreciation of India’s rich heritage.

Farewell Party for Third year students

On **April 29th, 2025**, the **COESA** committee of the Computer Department organized a memorable farewell party for the outgoing third-year students. The event, thoughtfully planned by the first and second-year students, featured a vibrant western theme complete with festive decorations, lively games, and a variety of delicious snacks.

With the gracious support of the principal, HOD, and departmental staff, the farewell program unfolded smoothly, offering a touching tribute to the seniors' journey over the past three years. The event not only celebrated their achievements but also marked the exciting beginning of their next chapter.

Second-year volunteers, including **Nilesh Suryavanshi, Prerna Mahokar, Lina Dhande, Shifa Ali, and Shaan Shukla** played a crucial role in making the evening truly special. Their efforts, along with the collective enthusiasm of the attendees, created a joyful and nostalgic atmosphere. As the evening drew to a close, everyone came together to wish the seniors a bright and successful future.

INDUSTRIAL VISITS 2024-25

*An industrial visit to **"Shivangi Bakers Pvt. Ltd. Khamgaon"** on **18th Oct 2024** organized for 69 students of **CO1K** to understand industry culture.*

*An industrial vist to **"BSNL Khamgaon"** organized for 64 students of CO4I on 18th Feb 2025 .*

*An industrial visit to **"Yash Industries Khamgaon"** on 02nd October 2024 organized for CO6I students to understand concepts of management.*


GPS Map Camera
Khamgaon,MH,India
Khamgaon, Khamgaon, 444303, MH, India
Lat 20.680284, Long 76.579926
10/18/2024 01:09 PM GMT+05:30
Note : Captured by GPS Map Camera

As part of the curriculum for the **Environmental Studies** (EST) subject in the 5th semester, a plantation activity was conducted on 24/10/2024. All students actively participated, planting a variety of species including Neem, Peepal, Snake Plant, Ashoka, and various floral plants. This activity not only enhanced the campus greenery but also instilled a sense of environmental responsibility among the students.

In this event, all faculty members of the Computer Department came together for a special plantation event. They planted a variety of plants, contributing to the green initiative and honoring the occasion with a commitment to environmental stewardship.

WORKSHOPS 2024-25

Digital Circuit Design for CO3K students

A two-days workshop was conducted from November 5th to 6th, 2024, for CO3K students. Led by Mr. Mohit Vyas, a Software Engineer at Accenture, the workshop provided second-year students with extensive knowledge and hands-on experience. The participants thoroughly enjoyed the sessions and gained valuable insights.

Project Exhibition for CO3K Students

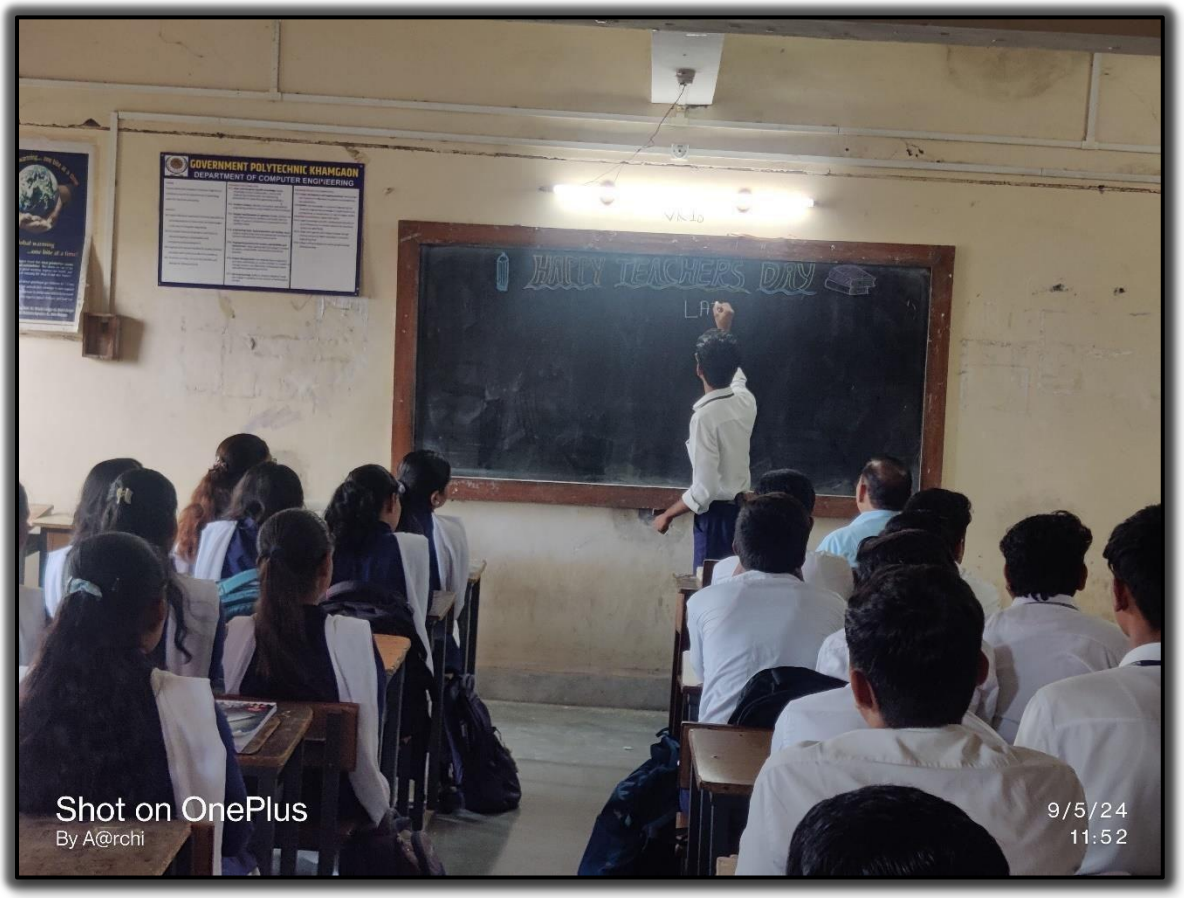
A Project Exhibition on Digital Circuit Design was conducted for CO3K students on November 11th, 2024. Through this Project Exhibition, students got a valuable hands-on experience and knowledge in the field of Digital Circuit Design.

Basics of AI-ML Workshop for CO4K and CO6I Students

A four-day workshop on basics of Machine Learning was conducted for CO4K and CO6I students on March 1st to 5th, 2025. The workshop, led by Mr. Dhiraj Gedam, provided the students with essential skills and practical knowledge in Artificial intelligence and machine learning.

TEACHERS DAY 2024-25

TUE, 5TH SEPT, 2024



Teachers' Day Celebration in the CO Department

In commemoration of **Dr. Sarvepalli Radhakrishnan's** birth anniversary, Teachers' Day was celebrated in the CO Department. Students from all three years actively participated by taking on the role of teachers. Specifically, students from the third year, including **Hansawahini Bhople, Om Gond, Nahush Deshmukh,** as well as students from the second year**, Leena Dhande, Shaan Shukla** actively contributed to the day's activities. At the end of the day, these student-teachers were appreciated with small tokens of gratitude for their dedication and commitment to sharing knowledge within the department.

EXPERT LECTURE 2024-25

On September **26 2024**, **Mr. Anup Khelkar**, a **Data Analyst, Entrepreneur & Technical Speaker, Oracle Certified Professional** at **Anup Kelkar's Python Academy**, **Nagpur** delivered an expert lecture to CO6I students. The session focused on **"Data Analytics with Python," providing insights into extracting, processing, and analyzing data effectively.**

On February **17 2025**, **Mr. Krishna Sawale**, a **Founder at Softtech Coderz, Mumbai,** delivered an expert lecture to CO6I students. The session focused on **"Revolutionizing Tech: E-commerce, Modern App Development, Headless CMS, and AI," highlighting emerging trends shaping the digital era.**

On February **13 2025**, **Mr. Manoj Kumavat**, a **CEO, Passion Software Solution,Jalgaon,** delivered an expert lecture to CO4K students. The session focused on **"Industrial Training and Software Development," offering valuable insights into web development and career pathways in software engineering.**

GATHERING 2024-25 (KALASRUJAN)

Active Participation of Computer Engineering Students in Annual Day Events

During the Annual Day celebration, students from the Department of Computer Engineering showcased exceptional enthusiasm and talent across various events including singing, dancing. Their active participation not only added vibrancy to the event but also highlighted their diverse skills and contributions to the cultural fabric of the institution.

INDUSTRIAL TRAINING 2024-25

We are proud to announce the outstanding achievements of our students during their industrial training at Sumago Infotech Pvt Ltd, Nashik [dated: 7th June 2024 to 14th July 2024]

During the industrial training, our students demonstrated exceptional technical skills, creativity, and teamwork while working on real-time projects. Their dedication and ability to adapt to professional work culture were highly appreciated by the company mentors. Among them, **Abhishek Bochare was honored with the Best Student Award for consistently delivering outstanding results**, and **Om Gond received the Uplifter Award** for showing remarkable growth and contributing innovative ideas. These achievements highlight the potential, discipline, and passion our young professionals bring to the industry.

ACHIEVEMENTS 2024-25

Achievements in Sports

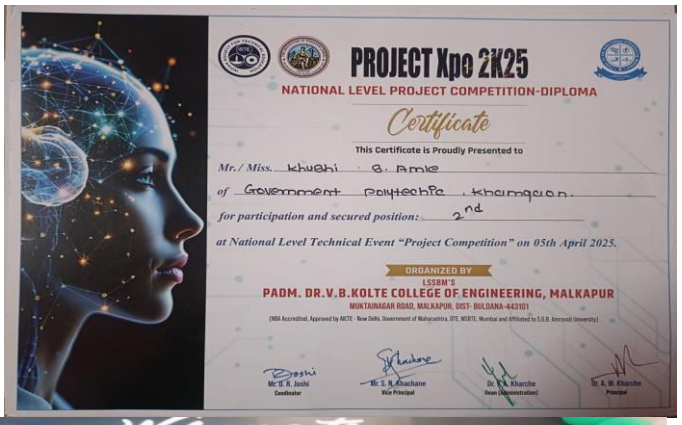
Vijay Bembalkar (CO6I) and **Aporva Shingade (CO2I)** showcased remarkable skill and coordination at the **Carrom Tournament** held at **Government Polytechnic, Washim**. Competing with determination and focus, they secured the **Runner-Up position** in this exciting event.

Their performance highlighted precision, strategy, and a strong competitive spirit. We congratulate them for bringing pride and recognition to our institute.

Our talented team comprising **Khushi Shyam Amle (CO4I)**, **Radha Sarangdhar Kale (CO4I)**, **Bhakti Ramesh Bahekar (CO2K)**, **Swanandi Suryakant Nimbolkar (CE2K)**, and **Bhumika Mukunda Bhathe (CE6I)** showcased remarkable skill at the **IEDSSA Women's H Zonal Sports Meet – Carrom** held on **30th–31st January 2024** at **Government Polytechnic, Yavatmal**.

Demonstrating great teamwork and sportsmanship, the team secured the **Runner-Up position** for the academic year **2024-2025**.
Their performance reflects the dedication, practice, and competitive spirit of our institute's sports culture.

Achievements in Technical Events



Our brilliant team comprising **Khushi Amle**, **Gauri Damdhar**, **Shruti Talokar**, and **Komal Naphade** represented **Government Polytechnic, Khamgaon** at the **National Level Project Competition – Diploma (Project Xpo 2K25)** held on **5th April 2025** at **Padm. Dr. V.B. Kolte College of Engineering, Malkapur**.

With their innovative project and excellent presentation skills, the team secured the **2nd position** in this prestigious technical event.
Each member was awarded a **certificate and medal**, marking a proud achievement for our institute. Their success reflects dedication, teamwork, and the spirit of technical excellence.

COESA 2024-25

GOVERNMENT POLYTECHNIC, KHAMGAON

COMPUTER ENGINEERING STUDENT ASSOCIATION
ACADEMIC YEAR 2024-2025

Samarth Chaudhari
Chairman

Shweta Wankhede
Vice Chairman

Hardik Gawande
Secretary

Shravani Paralkar
Magazine

Sojwal Kene
Magazine

Nahush Deshmukh
Magazine

Sojwal Kene
Technical

Pranav Tayade
Technical

Aryan Deshmukh
Technical

Adinath Dalavi
Cultural

Shradhha Raut
Cultural

Shruti Talokar
Cultural

Kunal Kanse
Cultural

Vijay Bembalkar
Games

Khushi Wawage
Games

Nandini Jaiswal
MOOCS

Ayush Agrawal
MOOCS

Prof. A. W. Sawarkar
COORDINATOR

Prof. S. V. Pranjape
HOD

The **Computer Engineering Student Association (CESA)** was formed with the primary aim to foster active engagement and collaboration between student and industry professionals. The organization is non-registered, non-profit organization within the department which is started by students along with faculties to manage technical and non-technical events. **CESA started in year 2017-2018**.And after covid-19 **CESA was renamed as COESA in academic year 2022-23.**

Achievements in Academics 2024-25

GOVERNMENT POLYTECHNIC, KHAMGAON

Jalamb Rd, Vithhal Nagar, Khamgaon Dist. Buldhana

Website:http://www.gpk.edu.in Email ID: office.gpkhamgaon@dtemaharashtra

COMPUTER DEPARTMENT

SHAILESH SURYAWANSHI

Congratulations

ACADEMIC YEAR 2024-2025 TOPPERS

3rd Year

RANK I

95.09%
ABHISHEK PURUSHOTTAM BOCHARE

RANK II

93.83%
NANDINI SACHIN JAISWAL

RANK III

93.66%
SHRAVANI MANOJ PARALKAR

2nd Year

RANK I

90.94%
LINA MOHAN DHANDE

RANK II

90.12%
VAIBHAV PRAMOD KHANDARE

RANK III

87.77%
PRAJWAL SANDEEP JAMODE

1st Year

RANK I

89.88%
SIDHANT VIVEK KULKARNI

RANK II

89.53%
DIVYA PRAMOD DAWALE

RANK II

89.53%
AASTHA CHANDRASEKHAR DHATRAK

RANK III

89.18%
RENUKA SANJAY UGALE

ARTICLES 2024-25

ChatGPT: The AI That Talks Back

In almost every engineering classroom, students ask themselves: What will the future of technology look like? Will machines ever think like us? Will they be able to design, solve problems, or even teach? Until recently, these questions felt like science fiction. But then came ***ChatGPT*** *— a program that doesn't just calculate, but actually talks back.*

Unlike most machines — engines that spin, circuits that blink, or code that runs quietly — ChatGPT does something special: it understands language. It belongs to a family of AI models called transformers and has been trained on a massive amount of text. That's why it can explain Fourier transforms in simple words, help brainstorm project ideas, or even give motivational advice before an exam. For engineering students, it feels like having a tutor, a teammate, and sometimes even a friendly guide, all in one.

How does it work? At its core, ChatGPT doesn't "think" like humans. Instead, it predicts the next word in a sentence, using billions of parameters. It was trained and refined with the help of human feedback, which is why its responses often sound natural. For teachers, this opens up discussions on algorithms, optimization, and ethics in AI. For students, it makes abstract concepts — like neural networks — easier to grasp, because instead of just reading about them, you can actually talk to one.

Of course, ChatGPT is not perfect. Sometimes it gives answers that sound correct but are technically wrong. Researchers call this "hallucination." For engineering students, this is an important reminder: never accept any result blindly. AI can suggest, but it is the engineer's job to check, test, and verify before building.

Even with these flaws, the impact of ChatGPT in education is clear. Classrooms are changing. Teachers are designing assignments that go beyond memorizing answers, focusing instead on analysis, creativity, and critical thinking. Labs and projects are shifting toward real-world applications — from smart cities and renewable energy to robotics and medical imaging. Students are learning not just how to use AI, but how to question it, improve it, and innovate with it.

What makes ChatGPT truly interesting is not just its answers, but the way it makes us rethink engineering itself. Building machines today is not only about gears, circuits, or lines of code — it's also about designing interaction, intelligence, and responsibility. The next generation of engineers will shape not just systems, but conversations and ethics too.

So, when a student uses ChatGPT to debug a piece of code, or when a professor uses it to prepare lecture notes, something bigger is happening. It's more than just problem-solving. It's a look into a future where humans and machines learn together. And that might just be the most exciting engineering challenge of all

Prof. S. M. Inwate

Senior Lecturer, Computer Engineering

The Impact of Artificial Intelligence on Modern Education

Artificial Intelligence (AI) is revolutionizing many aspects of our daily lives, and education is one of the fields experiencing the greatest transformation. For both students and teachers, AI is creating smarter, faster, and more personalized learning experiences, effectively bridging the gap between traditional classroom methods and modern digital learning.

AI-powered platforms can assess a student's strengths and weaknesses, recommend tailored study plans, and provide instant feedback. Virtual tutors, automated grading systems, and intelligent learning applications not only save time but also make education more accessible to a wider audience. In professional courses such as computer science diplomas, AI is enhancing practical training by offering real-time coding assistance, error detection, and project guidance—helping students learn more efficiently.

At the same time, it is important to recognize the challenges. Excessive reliance on AI tools may reduce creativity and independent problem-solving if students depend on them too heavily. For this reason, teachers and learners must strike a balance—using AI as a supportive tool while continuing to build critical thinking, originality, and self-learning habits.

In conclusion, Artificial Intelligence is no longer a distant idea of the future; it is already shaping the way we learn today. When used wisely, AI has the potential to make education more effective, interactive, and inclusive, ultimately preparing students to face the opportunities and challenges of tomorrow's world.

Gauri Ashok Dhisle
Student (CO4K)