

# MILESTONE

Department of Computer Science and Engineering

## From the Editor's Desk

Volume 7, Issue 2 highlights the vibrant journey of the Even Semester 2024–2025 in the Department of Computer Science & Engineering at GEMS Polytechnic College. This semester featured impactful activities including the Python Programming Course, the technical event CODE QUEST, an insightful Expert Lecture, an Industrial Visit, and the Earn While You Learn Network Cabling Workshop.

From academic excellence to skill-building initiatives and student achievements, this edition reflects the enthusiasm, growth, and collaborative spirit that continue to drive our department forward.

## A Message From HOD Desk

Dear Students, Faculty, and Alumni,

Greetings from the Department of Computer Science & Engineering! As we wrap up the EVEN semester of academic 2024 - 2025, I am immensely proud of our collective achievements. This period has been marked by enriching workshops, competitive events, and real-world exposures that align with our vision of holistic education. Initiatives like Python programming courses and the industrial visit to Ranchi Smart City have not only honed technical skills but also fostered creativity and collaboration. Our department, in collaboration with GPC SDC and Sparkle, has focused on bridging theoretical knowledge with practical applications, fostering innovation, and preparing students for the dynamic tech landscape.

I encourage all students to leverage these opportunities for personal and professional growth. Let us continue to innovate and excel in the dynamic field of computer science. Wishing you all success in your endeavors!

Mrs. Jenitha K  
Head of Department, CSE



## VISION OF THE DEPARTMENT

To produce quality diploma Computer Science Engineers to serve Ethically and Technically for the Advancement of the society.

## MISSION OF THE DEPARTMENT

M1: To strengthen the technical knowledge in computer science through analytical learning.

M 2: To inculcate moral and ethical values and interpersonal skills among the students.

M 3: To impart quality education with social awareness and train them in the development of community.

## PROGRAM EDUCATIONAL OBJECTIVE (PEOs)

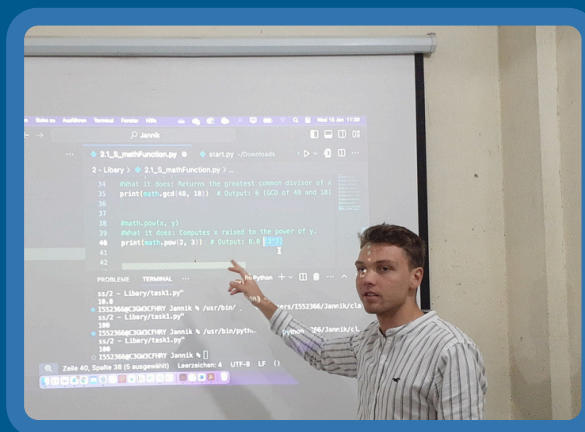
PEO 1: To provide diploma students with core competencies by strengthening their mathematical, scientific and basic engineering fundamentals.

PEO 2: To train diploma students in order to analyse, design and implement computer programming skills & concepts.

PEO 3: Students will be capable of adapting to new technologies and constantly upgrade their skills with an ethical attitude towards lifelong learning.

## Python Programming Workshops: Building Foundations and Advanced Skills

In January 2025, the CSE Department hosted two targeted Python programming courses, led by Mr. Jannik Kebernik, a Developer at SAP, Germany. These sessions provided hands-on training tailored to different year levels, Level - 1 for 2<sup>nd</sup> year students from 13/01/25 to 17/1/25 and Level - 2 for 3<sup>rd</sup> year students from 21/01/25 to 27/01/25 emphasizing practical implementation and industry relevance.



## Workshop for II Year CSE Students (January 13–17)

Held in the Programming Lab, this five-day event covered Python basics, syntax, variables, data types, operators, libraries, functions, conditional statements, loops, and debugging. Split into two batches for focused learning, it culminated in a hands-on project, Q&A, and tests. Students gained a strong foundation, practical experience, and industry insights, with certificates awarded to all participants. Outcomes included enhanced programming skills and motivation for advanced topics.



## Short-Term Course for III Year CSE Students (January 21–27)

Also in the CSE Programming Lab, this advanced program delved into Python syntax best practices, error handling, OOP concepts, file handling, exception handling, debugging, and data structures like lists, tuples, dictionaries, and sets. Ending with a real-world project, Q&A, and tests, it boosted students' technical expertise, problem-solving abilities, and job readiness. Certificates recognized their dedication, aligning with professional growth goals.

## Annual Sports Meet: Fostering Team Spirit (January 29–31)

The college-wide Annual Sports Meet brought a refreshing break from academics, with CSE students shining in events like athletics, team sports, and relays. While not a department-exclusive event, our students demonstrated remarkable enthusiasm, sportsmanship, and leadership. This meet reinforced the importance of work-life balance, physical fitness, and collaboration—key traits for any aspiring engineer. Kudos to all participants for representing CSE with pride!



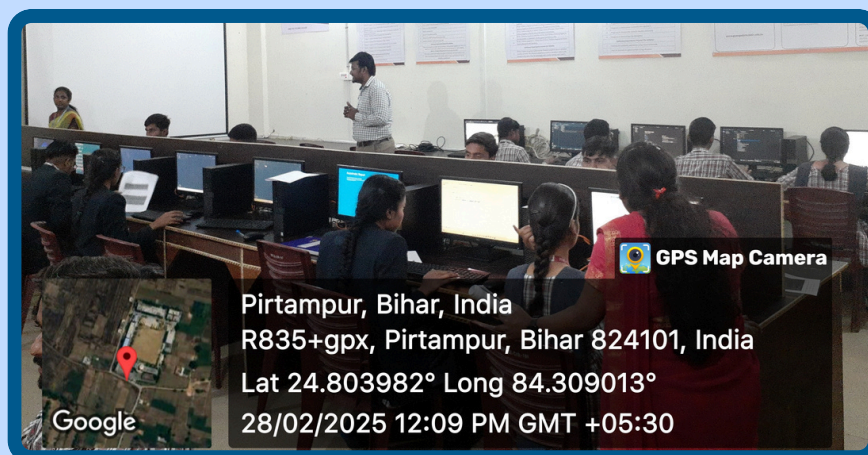
### TECHNICAL EVENT – CODE QUEST: DEBUGGING AND QUIZ COMPETITION (FEBRUARY 28)

On February 28, the department organized "Code Quest," a thrilling technical event combining a Debugging Round in the Programming Lab and a Technical Quiz in the Seminar Hall.

The morning debugging session challenged students to fix coding errors and logic issues individually, honing analytical skills. In the afternoon, teams competed in three rounds: Fundamentals of Programming, Core Subjects (DBMS, OS, CN, SE), and a Rapid-Fire segment blending technical and aptitude questions.



With enthusiastic participation, the event strengthened concepts, improved communication, and prepared students for interviews and exams. Top performers received prizes and certificates: the top three quiz teams and one first-prize winner per year in debugging. This competition truly sparked innovation and confidence!



## EXPERT LECTURE: ROLES OF COMPUTERS IN MODERN SOCIETY (MARCH 5)

Mr. Dani W. Thomas, a Risk Consultant in IT and Banking, delivered an insightful expert lecture on March 5, split into sessions for 1st and 2nd Year CSE students in the classroom.

Covering computers' impact on banking, healthcare, governance, education, and more, he highlighted AI, data analytics, cybersecurity, and automation. Interactive Q&A sessions deepened understanding of interdisciplinary opportunities, ethical thinking, and innovation.



Outcomes included broadened awareness of non-IT career paths, enhanced analytical skills, and motivation for domain-based projects. This seminar encouraged students to think critically about how technology is influencing career paths. Many took the opportunity to ask insightful questions regarding ethical challenges, security risks, and the future of computing in governance and business. A memento was presented to Mr. Thomas, making this a memorable learning experience.



## INDUSTRIAL VISIT: EXPLORING SMART CITY TECHNOLOGIES (MARCH 8)

On March 8, CSE students and faculty visited the Command Control and Communication Center (CCCC) in Ranchi Smart City. Accompanied by Ms. Ruby Kumari, Ms. Meena Kumari, Mr. Ragland Royal, and Mr. Venkatesh, the group explored AI-based traffic management, crime control, CCTV integration, data analytics, and emergency response systems.





Students interacted with officials, gaining insights into IoT, smart surveillance, and urban governance. Key takeaways included bridging theory with practice, understanding AI's role in public safety, and inspiring innovative solutions for societal challenges. This visit broadened horizons and motivated future projects in smart technologies.

## EARN WHILE YOU LEARN: NETWORK CABLING AND IT INFRASTRUCTURE (MARCH 17)

Coordinated by Mrs. Cathrine in collaboration with GPC SDC, the "Earn While You Learn" program from March 17 offered selected students hands-on training in IT networking and infrastructure at the Networks Lab. Led by Mr. James T and Mr. James Marandi from CTC, sessions included technical training, live projects, Q&A, and daily reflections.





Participants earned stipends while gaining practical skills in system configuration, troubleshooting, and teamwork. This initiative bridged academics with industry, boosting job readiness, financial independence, and alignment with Skill India goals. Students emerged more confident and equipped for professional roles.

## ★ ACADEMIC EXCELLENCE

Ms. Kiran Kumari, a 2nd-year student of Computer Science & Engineering, achieved an outstanding milestone by securing **Rank 2** in the overall academic performance of GPC 2nd-year students. In recognition of her hard work and consistent dedication, she was awarded a 30% tuition fee concession along with special appreciation. Her achievement reflects exemplary academic discipline and serves as an inspiration to her peers.



## LOOKING AHEAD

As we move into the latter half of 2025, stay tuned for more workshops, hackathons, and collaborations. We encourage all students to participate actively and suggest ideas for future events.

We extend our heartfelt congratulations to all achievers and sincere gratitude to students, faculty, and staff for their contributions. Together, let's continue striving toward innovation and excellence

For queries, contact the CSE Department at [cse@gemspolytechnic.edu.in](mailto:cse@gemspolytechnic.edu.in).

**Stay Innovative, Stay Connected!**

**With best wishes for a bright future,  
- Team CSE, GEMS Polytechnic College**