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TABLE OF CONTENT

●	Vision and Mission of the Institute
●	Vision and Mission of the Department
●	PEO's, PSO's & PO's
●	Industrial Visit
●	Guest Lecture
●	Activity Conducted
●	Forum Reinstallation
●	Students Achievement
●	Faculty Achievements
●	Outstanding Performance
●	Students Placements
●	Students Felicitation
●	Best Project by Student
●	Faculty Publication
●	Student Publication
●	Technical Event

Vision of the Institute

To emerge as a learning Center of Excellence in the National Ethos in Diploma in Engineering.

Mission of the Institute

M1: To elevate the standards of students through ethical practices.

M2: To provide facilities and services to meet the challenges of Industry and Community.

M3: To ascertain holistic development of the students and staff members by inculcating knowledge and profession as work practices.

Vision of the Department

To emerge as a learning Center of Excellence in the domain of Computer Science and Engineering to produce proficient diploma engineers.

Mission of the Department

M1: To impart quality technical education in the field of Computer Science & Engineering and develop the skill through modern teaching & learning method.

M2: To provide learning environmental to face societal and industrial challenges of Computer Science & Engineering.

M3: To ensure overall development of students and staff members by inculcating knowledge and professional ethics as a part of lifelong learning.

About TGPCET

Tulsiramji Gaikwad-Patil College of Engineering and Technology (TGPCET) Polytechnic was established in the year 2013 by Vidarbha Bahu-Uddeshiya Shikshan Sanstha (VBSS), a registered society. It is a self financed Private Polytechnic , which is affiliated to Maharashtra State Board of Technical Education (MSBTE) Mumbai and is approved by All India Council for Technical Education, New Delhi. Also college is approved by Directorate of Technical Education (DTE), Mumbai, Maharashtra State.

About Department

The Department of Computer Science and Technology at Tulsiramji Gaikwad Patil College of Engineering and Technology offers two specialized branches: Computer Science and Information Technology. With modern labs, experienced faculty, and an industry-focused curriculum, the department ensures strong technical foundations. It promotes practical learning through projects, workshops, and coding events. Students gain exposure to emerging fields like AI, Cybersecurity, and Data Science, preparing them for successful careers in tech.

HOD's Desk



Priyanka Choudhary

HOD, CW, Polytechnic

Welcome to the vibrant and dynamic Department of Computer Science & Engineering at TGPCET Polytechnic, Nagpur! In an era where technology evolves at an unprecedented pace, our department takes pride in nurturing the next generation of innovative minds in the realm of computing. We are committed to providing a robust academic foundation combined with practical exposure, enabling our students to thrive in the ever-changing tech landscape. At TGPCET Polytechnic, our distinguished faculty members bring a wealth of industry experience and academic expertise to the class room. We believe in cultivating an environment that encourages curiosity, critical thinking, and creativity among our students. Our focus extends beyond traditional learning methods, emphasizing hands-on experiences through state-of-the-art laboratories and collaborative projects. We aim not only to impart technical knowledge but also to instill ethical values and a sense of responsibility in our students, empowering them to become socially conscious professionals. Our department is dedicated to fostering an inclusive community where diversity is celebrated, ideas are exchanged freely, and each individual's potential is recognized and nurtured. We encourage our students to engage in extracurricular activities, research endeavors, and industry collaborations to broaden their horizons and prepare for the challenges of tomorrow. As the Head of Department, I invite you to explore the multitude of opportunities available within our department. Whether you aspire to develop ground breaking software, delve into cybersecurity, explore artificial intelligence, or innovate in any other computing domain, TGPCET Polytechnic is the ideal platform to embark on your journey towards success. I extend my best wishes to all our students and encourage them to dream big, strive for excellence, and make a meaningful impact in the world of Computer Science & Engineering

PEO's, PSO's & PO's

Programs Educational Objectives:

PEO 1. Provide socially responsible, environment friendly solutions to Computer engineering related broad-based problems adapting professional ethics.

PEO 2. Adapt state-of-the-art Computer engineering board-based technologies to work in multi-disciplinary work environments.

PEO 3. Solve broad-based problems individually and as a team member communicating effectively in the world of work

Programs Specific Outcomes:

PSO 1. Computer Software and Hardware Usage:

Use state-of-art technologies for operation and application of computer software and hardware.

PSO 2. Computer Engineering Maintenance:

Maintain computer engineering related software and hardware system.

Programs Outcomes (PO's):

1. Basic and Discipline specific knowledge:

Apply knowledge of basic mathematic 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 system components or processes to met specified method.

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, sutainability, environment and ethical practices.

6. Project Management:

Use engineering managements 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.

Industrial Visit



Department of **Computer Science & Engineering** have organized an Industrial visit at Maharashtra Remote Sensing Application Centre, VNIT Campus, S Ambazari Rd, Ambazari, Nagpur Maharashtra 440011

Aim: To understand its role in applying remote sensing technologies for various sectors.

Department of Computer Science & Engineering of Tulsiramji Gaikwad Patil College of Engineering & Technology, Polytechnic, Nagpur student visited "Maharashtra Remote Sensing Application Centre, Nagpur". The MRSAC Scientist Dr. Sanjay Apturkar gave detailed information regarding technical functionality of MRSAC.

Guest Lecture



Department of Computer science & Engineering under ISTE And IE(i) student chapter have organized Expert Lecture on topic “Java Programming” by Mr. Rohan Nachane, Dolphin Kart pvtLtd, Hyderabad, Nagpur

Aim: To equip participants with a deep understanding of Java's core concepts, enabling them to design, develop, and maintain robust, scalable, and secure applications.

Mr. Rohan Nachane sir explained, Java programming expert lectures cover a wide range of topics, from basic programming concepts to advanced features and frameworks. He delivered the session on basics of guidelines to how to learn java from basic & In-depth discussion on JVM architecture, memory management, and performance tuning.

Activity Conducted



FREE HEALTH CHECK-UP CAMP HB%(CBC),TSH,RANDOM BLOOD SUGAR &B.P. WITH BLOOD REPORT & GENERAL CHECK-UP

In Association With

**AYUSH BLOOD CENTRE & COMPONENTS LAB, DHANTOLI, NAGPUR
& CARE HOSPITAL DHANTOLI, NAGPUR**

Forum Reinstallation



Dr. G. K. Awari (Chief Guest) AICTE Margadarshak, sir has contributed for the professional development of students through ISTE Institution of Engineers professional society chapters. He is Fellow of Institution of Engineers and worked as Member of IEI Nagpur Local Centre (NLC), Nagpur in Mechanical Engineering division

Mr. Satish Raipure (Guest of Honour) Council Member & Chairman of IEI Nagpur Local Centre

· A past Chairman ACCEI Nagpur Centre,

AIM AND OBJECTIVE: 1. Revitalize Forum Presence: Strengthen the forum's presence and activities within the institution.

2. Promote Knowledge Sharing: Encourage collaboration and innovation among engineers and stakeholders.

3. Encourage Student Participation: Foster participation in poster competitions.

Students Achievements



**Our TGPCET Boys Football Team Won the First Prize
In Udaan 2k25**

**Organized by
Priyadarshini college Of engineering, Nagpur**



**Our Polytechnic Students Vaishnavi Gaidhane from Computer Science Engineering
Department have secured
2nd Prize at**

Inter Polytechnic Technical Competition-Champion Choice 2K25

**Organized by G.H Raisonni College Of Engineering ,
Nagpur**

Students Achievements



Our TGPCET Polytechnic Boys Team

Team for winning a I Zone competition and qualify for state level
Cricket tournament sponsored by the Inter Engineering Diploma
Students Sports Association (IEDSSA) Pune.
Organised at J D College of Engineering and Management
Diploma, Nagpur



Our TGPCET Polytechnic Girls Team

Winning a I Zone competition and qualify for state level Volleyball Tournament
sponsored by the Inter Engineering Diploma Students Sports Association (IEDSSA)
Pune.
Organised at Goverment Polytechnic, Nagpur

Faculty Achievements



TGPCET Faculty Honoured for Best Performance

A proud moment for Tulsiramji Gaikwad-Patil College of Engineering and Technology (TGPCET) as a faculty member was felicitated for Best Performance during a special event organized on campus. The felicitation took place in the presence of institute dignitaries and fellow staff, recognizing dedication, excellence in teaching, and contribution to student development.

Held at the college's seminar hall, the ceremony reflected TGPCET's continued commitment to acknowledging and motivating academic excellence among its faculty members.

Outstanding Performance



CSE Polytechnic Students Vaishnavi Gaidhane(3rd yr CSE), Omkar Pandhre (2nd yr CSE) , Dhruv Rode (2nd yr IT)

Won Second Prize in the State Level Technical Debate Competition

Organizes By

Indian Society For Technical Education (ISTE) at Government Polytechnic Gondhia

Outstanding Performance



**Our Polytechnic Students from Computer Science
Engineering Department have secured
2nd Prize at
Inter Polytechnic Technical Competition-Champion
Choice 2K25**

**Organized by G.H Raisonni College Of Engineering ,
Nagpur**

Student Placement



Mr.Vansh Hande
Branch CSE Final Year
Diploma



2.06 LPA



Mr.Devanshu Urkude
Branch CSE Final Year
Diploma



2.06 LPA

We are delighted to announce the successful placement of two of our talented students, **Mr.Vansh Hande** and **Mr.Devanshu Urkude**, at **Yalamanchili Software Exports Ltd.**, a leading company in the software solutions sector.

Their achievement is a testament to their hard work, skillset, and the continuous efforts of our Training & Placement Cell in preparing students for top industry roles.

We congratulate Vansh and Devanshu on this milestone and wish them great success in their professional journey ahead!

Students Felicitation

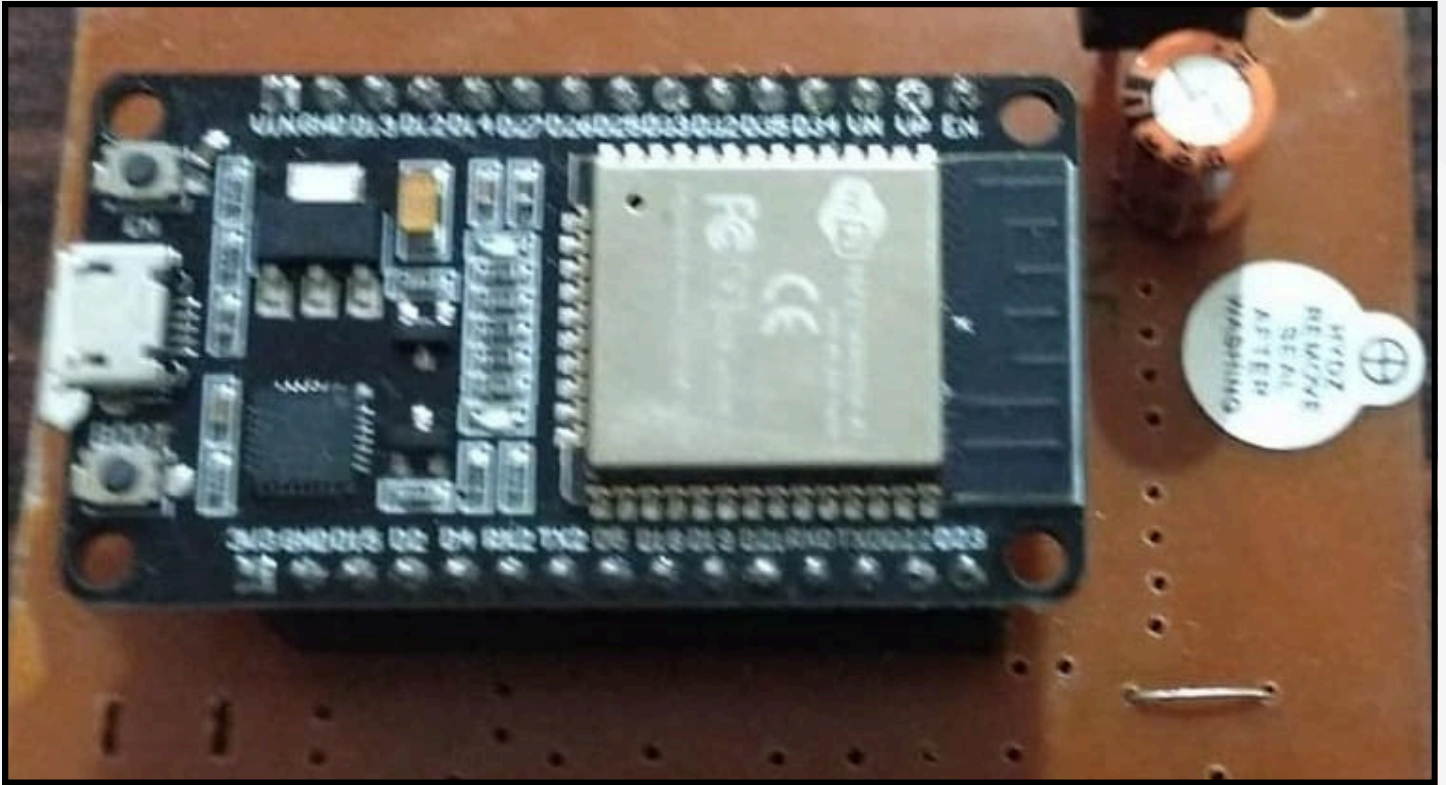


TGPCET Felicitates Academic Toppers with Pride

Tulsiramji Gaikwad-Patil College of Engineering and Technology (TGPCET) proudly celebrated the academic excellence of its students in a Felicitation Ceremony held on campus. The event recognized and honoured the toppers from various departments, including the Polytechnic Computer Science and Engineering Department, for their outstanding performance in academics.

Certificates and mementos were awarded to the meritorious students by the faculty and dignitaries, who encouraged them to continue their journey of excellence and innovation. The ceremony served as a moment of pride and motivation for the entire TGPCET family.

Best Project by Student



Students Develop Smart Mask Packing Machine Using ESP32 Microcontroller

A group of tech-savvy students has developed an innovative Mask Packing Stitch Machine aimed at improving the confidentiality and efficiency of exam paper handling. The heart of the system is the ESP32 microcontroller, mounted on a custom-designed PCB, which controls the semi-automatic process of masking, packing, and stitching answer sheets.

The project showcases practical electronics and automation, with components like capacitors, regulators, and a micro-USB interface integrated for reliable operation. This smart solution not only reduces manual workload but also enhances security in academic institutions.

Faculty Publication

Design and Implementation of Safety Robot System based on Controller

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ABSTRACT

Women's personal security has long been a significant concern, prompting discussions on potential technological solutions to address the issue. India, aspiring to be a superpower and an economic hub, grapples with numerous challenges, including patriarchal issues such as rape, dowry, and crimes against women, with rape being particularly egregious. In today's time. In the world, security of women has become a big issue as they cannot step out of their homes anytime due to fear of Physical/sexual abuse and violence. Hence, in an attempt to curb this contamination, atrocities on women now it can be put to an end with the help of smart safety device with the help of smart wearable band which can be wear on wrist and the use of smart flex sensor.

KEYWORDS : GSM, GPS, FLEX Sensor, Automatic alert.

Students and faculty from **Tulsiramji Gaikwad Patil College of Engineering and Technology**, Nagpur have published a research paper titled "Design and Implementation of Safety Robot System based on Controller" in the ISET Journal, May 2024 Edition.

Authored by **Pragati Patil**, **Abhimanyu Dutonde**, **Heena Bharat Kachhela**, and **Bramha deo Wadibhasme**, the paper presents a wearable smart safety device using GSM, GPS, and FLEX sensors to help protect women in emergency situations.

This innovative project reflects the team's commitment to using technology for social good. Congratulations to the authors!

Faculty Publication



VNIT Student Presents Paper on Wearable Tech at International Conference

We're proud to announce that **Ms. Sneha R Bhangе** from Visvesvaraya National Institute of Technology (VNIT), Nagpur successfully presented her research paper titled "Advancing Wearable Technology Through Raspberry Pi Integration" at the International Conference on Recent Trends in Technological Development (ICRTTD 2025).

The conference was held on 10th and 11th April 2025 at **Padmashri Dr. Vitthalrao Vikhe Patil Institute of Technology and Engineering** (Polytechnic), Loni. Her work highlights the innovative use of Raspberry Pi in enhancing wearable technologies, a field with immense potential for applications in health, safety, and smart systems.

Congratulations to Ms. Bhangе on her achievement and contribution to the future of wearable tech!

Student Publication



TGPCET Student Publishes Research Paper in Reputed International Journal

Students from **Tulsiramji Gaikwad-Patil College of Engineering and Technology (TGPCET)** has achieved a significant academic milestone by successfully publishing a research paper titled “Long Range Spy Robot Using Raspberry Pi” in the International Journal of Research and Analytical Reviews (IJRAR).

The publication, featured in Volume 12 Issue 2 of April 2025, recognizes the student's innovative work in the field of robotics and embedded systems. The paper explores the use of Raspberry Pi technology for long-range surveillance, reflecting the growing interest in automation and smart security solutions.

This accomplishment highlights TGPCET's commitment to encouraging research and innovation among its students, fostering a strong culture of academic excellence.

Technical Event



Second Year Polytechnic Students from Information Technology Engineering Department have secured 2nd Prize at

National level Technical Free Fire Event -TECH TRIX 2K25

**Organized by Priyadarshini J.L. College Of Engineering ,
Nagpur**

The competition saw participation from leading institutions across the country. TGPCET's team impressed judges and spectators alike with their exceptional coordination, strategy, and gaming skills. This win reflects the students' all-round development and the college's support for talent beyond the classroom.

Technical Event



Our Polytechnic Students from Computer Science Engineering Department Polytechnic have secured 1st Prize In (BGMI) AT National Level Event BIOFUSION 2025

**Organized by Biotechnology Department
Tulsiramji Gaikwad Patil College of Engineering &
Technology Nagpur**

The competition saw participation from leading institutions across the country. TGPCET's team impressed judges and spectators alike with their exceptional coordination, strategy, and gaming skills. This win reflects the students' all-round development and the college's support for talent beyond the classroom.



DTE Code: 4151

MSBTE Code: 1683

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

Approved by AICTE, Recognized by Govt. Maharashtra & Affiliated to MSBTE, Mumbai

— POLYTECHNIC —



GAIKWAD-PATIL
GROUP OF INSTITUTIONS



Courses we Offer:

- Computer Science & Engineering
- Information Technology
- Civil Engineering
- Mechanical Engineering
- Electrical Engineering
- Electronics & Communication



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